This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

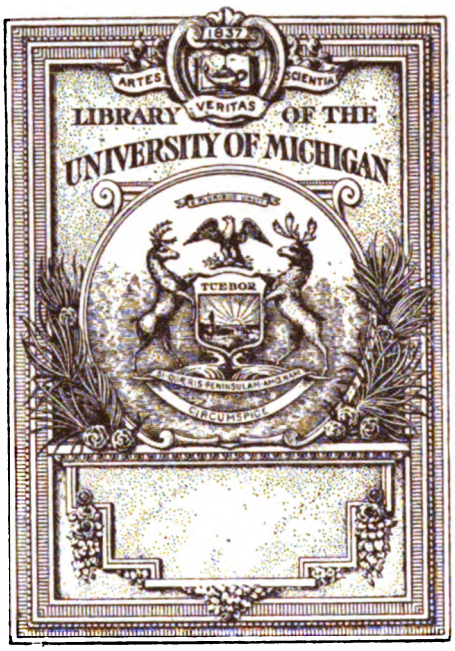
About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

Western Medical Review

Nebraska State Medical Association

Digitized by Google



RECEIVED IN EXCHANGE
FROM
Nebraska Univ. College of
Medicine Library

Digitized by Google

Digitized by Google

Digitized by Google

WESTERN

MEDICAL REVIEW.

VOL. I.—MAY TO DECEMBER, 1896.

VOL. II.—JANUARY TO DECEMBER, 1897.

GEORGE H. SIMMONS, L. M., M. D.,
EDITOR.

LINCOLN, NEB.:
WESTERN MEDICAL REVIEW PUBLISHING CO.

Digitized by Google

·512

117626

EDITORIAL CONTRIBUTORS.

HAROLD GIFFORD.
JAMES L. GREENE.
JOHN P. LORD.
HAMILTON B. LOWRY.
ALEXANDER S. VON MANSFELDE.
WILLIAM F. MILROY.

CONTRIBUTORS OF ORIGINAL PAPERS,

VOLUMES I AND II.

Aikin, J. M., Omaha....v. 1, 147; v. 2, 262, 340
Allison, Charles C., Omaha....v. 1, 152; v. 2, 68, 228
Anderson, A. B., Pawnee City....v. 2, 341
Bell, H. S., Kearney....v. 2, 197
Bishop, S. S., Chicago....v. 1, 215
Boyden, Henry D., Grand Island....v. 2, 301
Bridges, Willson O., Omaha....v. 1, 26; v. 2, 294
Brown, Ewing, Omaha....v. 2, 102, 366
Bryant, D. C., Omaha....v. 2, 65, 219
Bullard, J. W., Pawnee City....v. 1, 182
Butler, F. A., Harvard....v. 1, 34
Cherry, A. B., Winside....v. 2, 365
Christie, W. H., Omaha....v. 2, 61, 135, 371
Clark, R. A., Lincoln....v. 2, 70, 107
Coffman, Victor H., Omaha....v. 1, 53; v. 2, 254
Cokenower, J. W., Des Moines, Iowa....v. 2, 11
Cook, S. E., Lincoln....v. 1, 7; v. 2, 130
Coulter, F. E., Omaha....v. 2, 1
Crawl, Charles C., Randolph....v. 2, 264
Crummer, B. F., Omaha....v. 2, 39, 249, 372
Damour, F., Bolckow, Mo....v. 1, 181
Davis, Byron B., Omaha....v. 1, 81, 171; v. 2, 173, 291
Dayton, W. L., Lincoln....v. 1, 11, 146
Dawson, J. O., Lincoln....v. 2, 13
Denison, Chas., Denver....v. 1, 59
Detwiler, Augustus, Omaha....v. 2, 338
Emmert, J. M., Atlantic, Iowa....v. 2, 4, 229
Eskildson, Robert E., Omaha....v. 2, 171
Eskridge, J. T., Denver, Colo....v. 2, 37
Everett, M. H., Lincoln....v. 1, 10
Findley, W. J., Atlantic, Iowa....v. 2, 105
Frink, F. L., Newman Grove....v. 2, 108
Garten, M. H., Lincoln....v. 2, 165
Gay, B. F., Pierce....v. 2, 128
Gifford, Harold, Omaha....v. 1, 61; v. 2, 166
Grant, W. L., Fort Dodge, Iowa....v. 2, 101
Greene, J. L., University Place....v. 2, 7, 69
Grothan, Georgiana, St. Paul....v. 1, 117
Grothan, O., St. Paul....v. 1, 180; v. 2, 257
Haldeman, F. D., Ord....v. 2, 159
Hanna, Rebecca, Red Oak, Iowa....v. 1, 179
Hardy, J. M., Cairo....v. 2, 263
Hare, Hobart Amory, Philadelphia....v. 2, 235
Haslam, Geo., Fremont....v. 1, 218
Hay, J. T., Lincoln....v. 2, 34
Henry, W. O., Omaha....v. 2, 142
Hosmer, A. J., Salt Lake City, Utah....v. 2 326
Hunt, W. N., Central City....v. 2, 261
Ira, G. W., Santee Agency....v. 1, 89
Jonas, A. F., Omaha....v. 1, 29; v. 2, 9, 125, 285
Jones, W. D., Rising City....v. 2, 359
Leonhardt, J. S., Lincoln....v. 1, 121
Long, F. A., Madison....v. 2, 41, 344
Loper, A. N., College View....v. 2, 234
Lord, J. P., Omaha....v. 1, 57, 143, 207; v. 2, 195
Lowry, H. B., Lincoln....v. 1, 231; v. 2, 91
Lydston, G. Frank, Chicago....v. 1, 206
McArthur, L. L., Chicago....v. 1, 1
McClanahan, H. M., Omaha....v. 1, 119; v. 2, 162
McConaughy, Robert, York....v. 2, 231
Martin, Franklin H., Chicago....v. 1, 209; v. 2, 73
Martin, W. Ross, Omaha....v. 2, 31
Mason, Rufus D., Missouri Valley, Iowa....v. 2, 288
Meredith, G. A., Crawford....v. 1, 55
Mighell, N. E., Marshalltown, Iowa....v. 2, 134
Miller, A. F., Randolph....v. 1, 208
Miller, J. H., Gering....v. 1, 88
Milroy, W. F., Omaha....v. 2, 233, 370
Mitchell, A. R., Lincoln....v. 1, 5, 201; v. 2, 110, 334
Murphy, J. B., Chicago....v. 1, 149
Newbecker, Minerva M., Asylum....v. 2, 169
Owen, F. S., Omaha....v. 1, 213, v. 2, 302
Penrose, George H., Salt Lake City, Utah....v. 2, 329
Philbrick, Inez C., Lincoln....v. 1, 218
Pickett, I. N., Odell....v. 2, 226
Rankin, E. C., McLouth, Kan....v. 2, 294
Robinson, Byron, Chicago....v. 2, 62, 192, 342
Rosewater, Charles, Omaha....v. 1, 84; v. 2, 189
Salter, P. H, Norfolk....v. 1, 56; v. 2, 259
Schooler, Lewis, Des Moines, Iowa....v. 2, 338
Scofield, A. E., Tilden....v. 2, 138, 363
Silver, E. V., Salt Lake City, Utah....v. 2, 323
Sherman, A. W., Lamoni, Iowa....v. 2, 297
Shidler, G. W., York....v. 2, 40, 194
Somers, A. B., Omaha....v. 2, 5, 299
Stevens, J. F, Lincoln....v. 1, 13; v. 2, 253
Strong, Mary, Omaha....v. 2, 368
Summers, J. E, Jr., Omaha....v. 1, 25, 111, 204; v. 2, 96, 132
Sutherland, J. Lue, Grand Island, v. 1, 114, 176; v. 2, 251, 336
Tedrow, J. B, Williams, Iowa....v. 2, 220
Thomas, Frederic S., Council Bluffs, Iowa....v. 2, 290
Towne, S. R., Omaha....v. 2, 331
Treynor, V. L., Council Bluffs, Iowa....v. 2, 104
Tyndale, J. H., Lincoln....v. 1, 93
Viko, E., Park City, Utah....v. 2, 339
Ward, Prof. H. B., Lincoln....v. 1, 35
West, B. F., Lincoln....v. 2, 67, 202
Wetherill, H. G., Denver....v. 1, 120
Wilkinson, A. D., Lincoln....v. 1, 141; v. 2, 199
Wilson, G. W., Bertrand....v. 2, 11
Winnett, H. J., Lincoln....v. 1, 62; v. 2, 100
Woodbridge, J. E., Cleveland, Ohio....v. 1, 175

Digitized by Google

Nebraska Univ.
College of Med. Lib.
ex. 4-20-1926

Western Medical Review

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL I. No. 2. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. JUNE 15, 1896.

V. 1 no. 1 missing
V. 1 had only 8 nos.
V. 2 nos 4, 5 missing

Original Articles.

PRESIDENT'S ADDRESS.*

BY J. E. SUMMERS, JR., M. D.

OMAHA, NEB.

LADIES AND GENTLEMEN: Permit me to again express my acknowledgment of appreciation of the high honor conferred in selecting me to preside over your deliberations at our present meeting.

The brief communication which I have to make can hardly be considered in the light of an inaugural address, but if the few suggestions made are productive of good to the future prosperity of the society, we may have cause for congratulation.

To the student it cannot but be apparent that the past year has been one of wonderful progress in the medical sciences. The cause and prevention of disease being in the van—micro-biology and physiological chemistry the keys. It is not my purpose to attempt to enumerate what may justly be considered the advancements; the problem would be too serious, but the educated world has awakened to a realization of the fact that the science of medicine is the greatest of sciences. It combines all of the higher sciences; its possibilities are beyond imagination. There is no thought so beautiful as that of a world without disease; where sickness, pain, and sorrow are prevented by a thankful appreciation of the greatest gift of God, the intellect. We of to-day owe a duty to those who have preceded us, and advanced medicine so as to place it among the sciences. We each can do our mite. Perhaps few have minds so trained as to participate largely in the more deeply scientific departments of the profession, yet we can do much by furnishing thought and material for these workers—harvesting the products of their labors, separating the grain from the chaff for the prevention and cure of disease. Second only to books and journals comes a medical society, as our best post-graduate educator, and it is a lamentable fact that this is not appreciated. Throughout the Union, not more than one in five physicians are members of their respective state medical societies, and, worse still, in many well populated districts, counties, and cities no local medical societies are organized. In a recent address by a well-known surgeon, the statement was made that in his state not more than one in twenty-five of the physicians were members of the state medical society. What a commentary on a commonwealth that had produced a McDowell, leaving a heritage recognized in both hemispheres! The medical profession of Nebraska has not done its duty towards the state society, only about one in five eligible physicians being members. From every point of view there is much to be gained in an active membership. "There may be ever so much fire in a flint, yet without friction it cannot be called forth. The medical society is designed to bring out the fire of thought from the reasoning centers."

For myself it can be truly stated that I never attend a medical society meeting that I do not learn something. Either an appreciation of ignorance or weakness in some particular subject is felt, or a feeling of pride and strength in my work urges me on to further endeavor, and this must be the experience of every one. Any member who will merely listen to the papers and discussions promised by the program of this meeting cannot fail to go home well repaid for his attendance; he will have a kindlier feeling towards his brother practitioner, and if made of the right kind of material, he will have a better appreciation of himself and a greater desire, by honorable means, to impress his community of this fact. I have been especially impressed that there are entirely too many good men not members of our organization; it is also noticeable that as a rule, in the communities which I have visited, the physicians having the best equipped offices and greatest evidence of professional prosperity were members of the State Medical Society. The layman appreciates this is a time of progress; that the physician who is a student, is interested in his profession, attends the local and state medical societies regularly, goes to the medical centers for practical instruction occasionally, he is the safer man, and employs him in preference to the bigoted know-it-all, stay-at-home, non-interested, non-progressive barnacle of the profession. The great advance in medical knowledge has been necessarily accompanied by so great an increase in the requirements of a medical education that a proportionate increase in time of study demanded of students has become an absolute necessity. The medical schools of our states have kept in touch with the progress, and now require four courses of lectures, no two to be held in the same year. They also demand a good preliminary education prior to matriculation. This is as it should be. Although it may work an occasional hardship, it is for the common good, and we as a society should bend every effort to maintain this advance in medical education by impressing upon our law-makers to so modify our present state law as to demand of a physician

* Delivered before the Nebraska State Medical Society, Lincoln, May 19, 1896.

Digitized by Google

wishing to practice in Nebraska that he shall have graduated from a school requiring four years of medical study in college before receiving a certificate from the State Board of Health. Undoubtedly it would be better still if, in addition, an examination by the Board were required, but perhaps we had better not try and ask too much now; past experience would indicate this. I would suggest that a committee of this society arrange to confer with a like committee of the Homœopathic and Eclectic State Medical Societies, with the object of so utilizing their combined strength that the standard of admission to practice medicine in our state will be elevated, as has been done in many other states. Otherwise, Nebraska will become the dumping-ground for the short-time graduates. It is a vital matter to every legally qualified medical practitioner, and cannot fail of endorsement. I would also suggest that hereafter our proceedings be bound in substantial form, and that they do not be given to any medical journal whose existence may be precarious. The old method of publication, that is, a bound transaction, as in most of the other states, is preferable. Every writer should be allowed the privilege of publishing his paper in any journal of his own choosing, handing a copy to the secretary of the society for publication in the bound transactions. By following this plan, writers may publish their papers either in local journals or those of a more special or cosmopolitan kind, in this way broadening the reputation of authors and of the society.

The bound transactions we will have as records of business, reminders of happy intellectual communion, monuments of progress. It is quite noticeable that too many papers are from members living in one section of the state. This breeds indifference and timidity among those living elsewhere, and does not give proper recognition. It is harmful, also, because proper knowledge of the natural history of diseases, as observed by our fellows under the different climatic influences of our state, is not recorded. For example, pneumonia and some other pulmonary lesions will not behave the same with a humidity and elevation of Omaha as they may in the more western sections, with less humidity and several times the elevation. The same is true of cardiac and renal diseases, as it certainly is of rheumatic and some so-called nervous diseases. Nature affords a better asepsis in the management of surgical diseases and injuries in the dry, pure atmosphere of Western Nebraska than can be expected in the dusty, smoke-laden atmosphere of its eastern cities. There is apt to be less putrefaction of discharges in infected wounds, and less likelihood of infection, because of the absence of those elements essential to the existence and propagation of micro-organisms. Surgical shock is not so soon recovered from in elevated districts as in sections nearer the sea level. The heart cannot react so promptly; hence greater care is necessary in the preparation of the patient prior to and in the treatment after surgical operation, whether done for traumatism or disease. Personal experience has taught me the wisdom and truth of these practical subjects, which can easily be elaborated. The broadness of the field has merely been suggested. Would it not be well to have the president appoint a special committee, whose members come from all scattered sections of the state, whose duty it will be to secure new members, and also the readers of papers for the following meeting? Not that we require a greater number of readers of papers; on the contrary; but a more equal geographical distribution and fuller discussions. A perusal of the transactions of the medical societies in most of our sister states cannot but reflect credit upon the work done by our own society; yet, if we would be among the foremost, the leaders, let us redouble our efforts, with the assurance that success in the broad field of medical science is not limited geographically, but is meted out to those who strive for it worthily.

THE SIGNIFICANCE OF BLOOD EXAMINATIONS IN DISEASE.*

By WILLSON O. BRIDGES, M. D.,

PROFESSOR OF MEDICINE AND CLINICAL MEDICINE IN THE OMAHA MEDICAL COLLEGE.

In this brief paper I desire to call attention to recent progress in the examinations of blood in disease, in its bearing particularly on diagnosis, prognosis, and treatment. On a visit to Johns Hopkins Hospital in Baltimore, less than a year ago, I was impressed with the importance given this subject, and interested to note the scientific precision, not only in the diagnosis of diseases in which blood examinations have an important place, but also in determining the probability of complications, the influence on prognosis, and the indications in treatment.

In the days of that most eminent and most pleasing clinical teacher, Sir Thomas Watson, not longer than sixty years ago, much was considered of the appearance of the blood in different diseases, and pages were written upon the peculiarities of its behavior as regards "cupping" and the "buffy coat" in inflammatory and non-inflammatory affections, and of the interpretations which were to be given to the macroscopical appearances in the different conditions. It may be of interest in this connection to quote from Watson's Practice a few lines following a long dissertation on the changes occurring, as follows: "I have dwelt the longer on this peculiar appearance of the blood because it really is of very great importance in determining the nature of various complaints, and in directing our treatment to them. Speaking generally, when a given organ is inflamed, the buffy coat is more marked in proportion to the intensity of the inflammation. When the organ is not known, it is more likely to be of a fibrous or a serous texture, in proportion as the blood is more

* Read before the Nebraska State Medical Society, 1896.

Digitized by Google

decidedly buffed. The appearance of the buffy coat is especially valuable as an indication of treatment in cases concerning which we are in doubt whether they are inflammatory or not. On the other hand, if we have good evidence in other symptoms of the existence of inflammation, we are not to be shaken in our opinion by the absence of the buffy coat. Inflammation may certainly exist without it." With the passing of the day when bleeding was resorted to as the first step in the care of the patient, regardless of the disease, passed also the importance of the buffy coat as a determining factor in diagnosis and treatment.

Laveran's discovery of the malarial plasmodium in 1880 gave a wonderful impetus to microscopical work on the blood, and it may be stated that the present knowledge derived therefrom is of such recent date as to warrant the statement that we are but on the threshold of discoveries along this line. It is to the practical part of this subject, which lies in the power of any physician to apply who can and will use the microscope, which I desire to call your attention. We will therefore take up the diseases more commonly met with and those liable to be encountered in every-day work.

The work of Laveran, Marchiafava, Osler, Councilman, James, Carter, and others has demonstrated beyond question the dependence of the malarial fevers upon a variety of germs which are designated the malarial germs, or hematozoa, and which are found in the blood in all cases of malaria and are not found in other diseases. The germs exist in the blood plasma, or in the substance of the red blood cells. When in the latter the germ is called the plasmodium. The different varieties found are believed by Golgi and others to represent the etiology of the different types of the malarial fevers. They are, as given by Osler: An impigmented hyaline body within the red blood corpuscle which displays active movements; a pigmented amœboid body within the corpuscle, which, under certain circumstances, may increase in size and form; a segmenting body in which the protoplasm divides into a number of small spheres; crescentic bodies which develop within the corpuscle; flagellate bodies and free flagella. Golgi has shown that corresponding to the paroxysm of malarial fever there is a process of segmentation in these bodies. According to Osler, "the relation of the different phases of growth to the varieties of malarial fever has not yet been thoroughly established, but the following points may be referred to: The typical intermittents are associated with large forms of the parasites, of which several varieties have been described. Golgi has described two distinct forms which he considers the causes of tertian and quartan fevers, and makes all other types depend on combinations of these. This probably holds good for a large number of intermittents. With the remittents, Marchiafava and Celli have described a distinct species, and look upon the crescents as representing a phase in its development. The pernicious malarial fevers are also associated with this variety, which the Italian observers call the small plasmodium. The crescents may also occur in acute cases, but are most constant in the cachexiæ." The general symptoms and the morbid anatomy of malaria, Osler further states, are in harmony with the changes which this parasite induces.

With such evidence as is a matter of record, the existence of the plasmodium in the blood of whatever variety is of the utmost importance from a diagnostic standpoint. In the out-patient department of Johns Hopkins Hospital a diagnosis of any type of malarial fever is not entered on the records until the hematozoon is demonstrated under the microscope. I have even seen the time of the paroxysm correctly stated by the chief of the medical clinic from the process of segmentation noted in the examination of the blood. With these facts at hand, there is no longer reason for doubt in the diagnosis of the malarial fevers. It is in the power of any medical man familiar at all with the microscope, and with the literature at command to qualify himself sufficiently for these blood examinations. I recall a case seen in consultation a year or two ago which aptly illustrates the point I wish to lay stress upon. It was that of a young woman several months pregnant who was taken with a fever while resident in a country town. There was some tenderness and pain in the vicinity of one of the broad ligaments. The attending physician and a consultant had diagnosticated probable abscess and advised a laparotomy. The patient was brought to one of our hospitals for further consultation and placed in charge of our worthy president. Two physicians who saw the case were inclined to agree with the diagnosis and advice previously given. In the discussion a blood examination was suggested, and on being made by Professor Lavender the malarial hematozoon was positively demonstrated. The patient was placed on heroic doses of quinine and immediately responded, going on to complete recovery.

I believe there are many cases of typhoid fever mistaken for malaria, and again, probably more cases of malarial fevers mistaken for other affections. In all of these the microscope can clear up any doubt. Gilman Thompson, in Pepper's American Text-Book of Medicine, states: "It is certain, however, that the germ exists in human blood during and between malarial paroxysms in numbers sufficient to exert powerful effects, for it can often be found in almost every drop of blood drawn. Moreover, it is never discoverable in normal blood, or in disease other than some form of ague. In chronic forms of ague and in doubtful cases the presence of the germ in the blood is of great value in diagnosis."

The anæmias constitute a group of cases in which blood examinations are of the greatest utility. In these affections the three essential

Digitized by Google

factors necessary to determine are: The proportionate amount of coloring matter, or hemoglobin; the number of the red blood corpuscles to the cubic millimetre and the number of the leucocytes. The different characters of the latter, also, are of importance oftentimes in the differential diagnosis. The primary or essential anæmias are divided into chlorosis and progressive pernicious anæmia.

In chlorosis, the red globules may be present in normal amount, but in severe cases there is a considerable reduction. The hemoglobin, however, is much reduced, in fact, in all cases out of proportion to the reduction in the red corpuscles. This is peculiar to chlorosis, and serves to differentiate it from pernicious anæmia, in which the globular value in hemoglobin is increased. In a recent case of chlorosis under my observation the percentage of hemoglobin at the first examination was only thirty-five. Under the use of Blaud's pills, in a week it had risen to fifty-five, and in three weeks to seventy-five per cent. Coincident with this increase was noted a marked change in the color of the skin and mucous membranes, and the disappearance of the "bruit du diable," which was the loudest I had ever heard. Under the microscope a pallor of the red corpuscles is manifest, and sometimes poikilocytes, or deformed red globules, are found.

In pernicious, or Addison's anæmia the reduction in number of red corpuscles is always marked and generally extreme. In one case reported by Quincke there were 143,000 to the cubic millimetre, whereas the normal is represented at 5,000,000. The hemoglobin is not reduced in proportion to the corpuscle element, the percentage always being higher relatively. In one of Osler's cases this was noted by ten per cent. This point is of great importance in the differential diagnosis of pernicious anæmia from chlorosis and the secondary anæmias. It is considered by many a pathognomonic sign. Under the microscope the fresh blood slide reveals many large red globules called megalocytes. They are a constant feature in the disease, and, it is supposed, account for the relative increase in hemoglobin. The number of white blood elements is not increased. Ehrlich has pointed out the constant presence of two varieties of nucleated red blood corpuscles, one of normal size, containing a nucleus which stains intensely, and other larger forms, with large, faintly staining nuclei, called giganto blasts.

The secondary anæmias, or those following acute diseases, inanition, hemorrhage, and the like, always present a reduction in the number of red corpuscles, from a slight decrease in the milder cases to an extreme reduction in the severe, and with the decrease is corresponding diminution in the percentage of hemoglobin. The number of white corpuscles is always relatively, and sometimes absolutely, increased.

Among the more interesting blood phenomena which are now engaging the attention of the profession are what are known as the leucocytosis. By the term "leucocytosis" is meant a non-leukemic increase in the leucocytes in the blood. For many years this has been known to occur in inflammatory diseases, for we find in Watson's Practice a notation by Condie, the reviser, as follows: "In nearly all the strongly developed acute inflammations there is an excess of fibrin and of the colourless or lymph elements of the blood." Modern investigation has shown the importance of this subject, not only in the diagnosis, but the prognosis of some diseases. It may be stated that in all acute non-inflammatory infectious diseases there is no leucocytosis. In all acute inflammatory diseases there is a marked leucocytosis. A determination, then, of the number of white elements in the blood will in a given case assist materially in differentiating between these affections. Again, if in the course of an acute non-inflammatory disease there is at any time impending a complicating inflammation, there develops at once a marked leucocytosis.

In the acute inflammatory diseases the behavior of the leucocytosis is found to have quite a bearing on prognosis. Thus, its study in pneumonia indicates an increase, with the lung consolidation reaching its maximum just previous to the crisis, when coincidently with the fall of temperature there is a sudden decrease in the leucocytosis. Osler states: "There is some reason for believing that the greater the degree of local reaction (of which the leucocytosis may be regarded as an index) in a disease like acute lobar pneumonia, the less is the virulence of the blood poisoning." Tschistovitch, supported by Von Jaksch, claims that in pneumonia, where the leucocytosis is slight, the termination is always fatal. In support of this, Ewing, in the *New York Medical Journal*, December 16, 1893, gives the report of an examination in 101 cases, of which there were thirty-seven fatal. He writes: "An examination of the deaths will show that in severe forms of lobar pneumonia a slight leucocytosis is a very unfavorable sign. In six fatal cases the leucocytosis was subnormal. In eleven fatal cases the average number was 9,000. Not one case recovered in which the disease was of even moderate severity when the number of white cells fell below 14,000. In several instances, again, a slight leucocytosis seemed at the time the only unfavorable prognostic sign in cases ending fatally." R. C. Cabot still further corroborates these conclusions in reports of sixty-five cases to the *Boston Medical and Surgical Journal*, August 3, 1893, and March 22, 1894. If in cases of pneumonia the leucocytosis does not subside at the time of crisis, whether the temperature falls or not, the prognosis is either unfavorable or some complication is imminent. In a paper (*Medical Record*, May 9, 1896) before the recent meeting of the Association of American Physicians, Dr. Andrew H. Smith refers to a case in point: Pneumonia, seventh day, temperature 103, leucocyte count 54,500. The

Digitized by Google

crisis occurred the following day, with a temperature of 99, but there was still a leucocytosis of 42,000. Examination showed that empyemia was developing.

The normal number of leucocytes to the cubic millimetre of blood is five to eight thousand. In acute disease, with inflammatory foci, this number is increased to forty, fifty, or even one hundred thousand. It may be stated also that the malignant neoplasms are also attended with a great increase.

In the varieties of leukemia, the utmost importance has been placed on examinations of the blood. It has been known for many years that in all cases of these affections there is a great increase in the proportions of white to red cells, this increase being so great as to represent one leucocyte to eight or ten red corpuscles, in place of one to five or eight hundred. In exceptional cases the white have been found to equal or exceed the red in number. The greater increase is found in the so-called myelogenic forms of leukemia. Frequently a slight glance at the fresh blood slide will be sufficient to establish the diagnosis. The color of the blood is often a reddish brown or chocolate. The blood differentiation of the varieties of leukemia necessitates a study of the varieties of leucocytes in normal blood. These are:

Lymphocytes—About the size of red blood corpuscles, with large, roundish nuclei, deeply staining, with non-granular protoplasm, making up twenty to thirty per cent of the whole number.

Large Mono-nuclear Forms—Having a large, oval, feebly staining nucleus, well developed non-granular protoplasm.

Poly-nuclear Leucocytes—Smaller than the mono-nuclear, having irregular forms of nuclei, with a granular protoplasm which is neutrophilic. These constitute about two-thirds of the total number.

In the myelogenic form of leukemia the lymphocytes are relatively diminished in number, the poly-nuclear are either diminished or normal. The striking peculiarity is the presence in great numbers of white cells, which are not found in normal blood. Thy are as large or larger than the mono-nuclear forms, but differ from them in having a protoplasm which is filled with neutrophilic granules. They were called myelocytes by Ehrlich, who first described them, and were supposed to be derived from the bone marrow. Nucleated red corpuscles are also found in this affection, and the number of red cells, as well as the hemoglobin, are reduced.

In the lymphatic leukemia the blood slide appearances are different from the above. The proportionate increase of leucocytes is not so great. The increase is entirely confined to the lymphocytes, all other varieties being decreased. Myelocytes are not found. Eosinophiles and nucleated red cells are rare.

The blood count in most acute diseases is becoming, in many hospitals, as much a matter of record as the temperature and the pulse. Notations of the decrease in red corpuscles and the percentage of hemoglobin makes up considerable in the judgment of a case from day to day. I believe the near future will demonstrate the significance of changes which have as yet no interpretation.

Among the diseases not commonly met with in which blood examination is of the greatest utility may be mentioned relapsing fever and the diseases produced by the filaria sanguinis hominis. In relapsing fever, during the paroxysm the spirillum of Obermeier is invariably found in the blood. In hemato-chyluria the embryos of the filaria are seen in the blood only at night. Osler reports a quite interesting case. In lymph scrotum and in some forms of elephantiasis the filaria are to be found.

In the last number of the Johns Hopkins Hospital Bulletin, Thayer refers to a case, yet unpublished, of malignant endocarditis, in which the gonococci were found in the blood in pure cultures at three different examinations. About one year ago I heard Professor Welch of Baltimore report the results of an autopsy of a case of malignant endocarditis developing upon a gonorrhœa in which the gonococci were found in the secretions of the vagina, in the blood, and in the scraping from the cardiac valves affected.

The discovery of the specific cause of infectious diseases opens up wonderful possibilities incident to blood examinations, and who can say that the secrets concerning scarlet fever, whooping cough, syphilis, and a host of diseases may not be as clearly revealed as have those of malaria, diphtheria, gonorrhœa, relapsing fever, and others?

INTRA-ABDOMINAL INJURIES FROM HORSE-KICKS—IMMEDIATE AND REMOTE EFFECTS.*

By A. F. JONAS, M. D.,

PROFESSOR OF CLINICAL SURGERY AND ORTHOPEDIC SURGERY IN THE OMAHA MEDICAL COLLEGE; SURGEON TO THE OMAHA (METHODIST) HOSPITAL AND DEACONESS HOME, AND TO THE DOUGLAS COUNTY HOSPITAL, ETC., ETC.

No class of traumata produce such a variety of injuries and in such varying degrees as the kick of a horse upon the abdomen. The force of the blow to a given spot does not always determine the extent of the intra-abdominal damage, whether that force expended itself on the extra or intra-peritoneal structures. The immediate symptoms are not always easily interpreted, and often are misleading. The early symptoms are sometimes alarming, and yet complete recovery may ensue, and again, the subjective and objective manifestations may arouse no particular anxiety, and still a complete intestinal rupture may have

*Read before the Medical Society of the Missouri Valley, September 20, 1895

Digitized by Google

taken place. This form of injury is relatively infrequent; no one man can have a very large experience. It therefore is of the utmost importance that the knowledge of our own limited experience be supplemented by a careful study of the literature at our command, to learn the leading diagnostic signs in each case, noting the predominating features in all the cases, and giving to each its proper significance.

From a practical standpoint we shall be confronted with two classes of cases—recent and old. By recent cases we understand those that come under our observation immediately or soon after the accident. By old cases, we mean those where the individual recovers from the immediate effects, but suffers for a long period from pain and functional disturbances.

Under the head of recent cases may be cited the following two:

In the summer of 1880 was summoned to attend M. L., farmer, aged 40; of medium height, muscular, and well-nourished; weight 150 pounds; had always enjoyed good health. The previous evening, while attending to his horses, and while passing behind them, was suddenly kicked by one of them, in the abdomen, the hoof striking in the median line about one inch below the umbilicus. He was not thrown to the ground; aside from a momentary pain, and slight faintness, he recovered so that he finished his chores, ate a fair supper, but retired early on account of the abdominal soreness and a feeling of general lassitude. During the night the soreness became worse, and by morning he was in considerable distress. On examination at noon he occupied a recumbent position, from which he was disinclined to move on account of increased pain. There was no abdominal distention; nothing abnormal on percussion was elicited. There existed a distinct tender spot under the site of the kick, which itself was marked by a bruising and ecchymosis, distinctly showing the outlines of a part of the hoof. No intra-abdominal thickening could be made out. Respirations were somewhat shallow, but not increased in frequency. Had vomited his supper, undigested, during the night. Had much difficulty in urinating. Pulse 100, soft and full; temperature normal. Ordered absolute rest, fluid diet, hot fomentations, and anodynes; an enema to move the bowels. The following day the pulse had increased to 110, and was of a peculiarly hard character; temperature 101 degrees; moderate abdominal distention; tenderness on pressure over entire lower bowels; nausea, but no vomiting. Respirations increased and more shallow; anxious expression of face; bowels had not moved. The treatment was continued, but no farther attempt at moving the bowels was deemed advisable. Cold sponging was advised to reduce temperature. Nutrient enemata were advised. The following day, as the conditions had apparently not become worse, no change in treatment. The next day, while on my way to the patient, a distance of eighteen miles, I was met by a messenger, who urged haste. The patient had become much worse. Upon arrival we found the patient in a dying condition, breathing his last shortly after. His pain and abdominal distention had grown suddenly worse during the night, soon becoming delirious and frequently vomiting. No post-mortem could be obtained. Cause of death undoubtedly perforative peritonitis.

Case II. Mr. J.; age 22. A specimen of perfect, robust health. Muscular and well nourished, weight 170 pounds. One night, the same summer as the preceding case, while in the stable after a return from a night drive, and while passing with a buffalo robe on his shoulder behind a mare that was afraid of everything resembling a fur robe, was suddenly kicked with great force, striking the stomach with such violence that the young man was thrown about ten feet, falling unconscious. How long he remained in this condition he could not tell. When he became conscious the pain in the epigastrium was so severe that he could not rise to his feet. With much exertion and great effort he managed to crawl on hands and knees about one hundred yards, then up one flight of stairs to his room. He then vomited severely, with no relief from pain. One-half grain of morphia had little effect. This dose was repeated in an hour, when the pain became endurable. During the following day frequent vomiting, the ejecta being mixed with blood. There was much distention over the epigastrium, and acute tenderness. In the lower abdomen relatively little bloating. Pulse and temperature normal. Bowels remained obstinately constipated for five days, when they moved after repeated high enemata. Retention of urine about twenty-four hours. The treatment consisted in absolute rest in bed, anodynes, fluid diet in small quantities. The nausea disappeared in two days, the pain in five or six, tenderness in ten, and an ordinary diet was resumed on the fourteenth day. Recovery was complete.

In reviewing the foregoing cases, we are first of all impressed with the fact that the severity of the injury is not in direct proportion to the force of the blow. Both men were in perfect health, both strong and muscular. The younger and heavier man received a blow which threw him about ten feet, causing unconsciousness. The immediate symptoms were severe, but he recovered completely and is today anything but an invalid. The other, the senior by eighteen years, received a blow which did not even stagger him, was able to finish his chores, and yet died from the effects. Both were struck on the hollow viscera, the one on the stomach, the other on the bowels. The difference in the ages of the two men throws no light on the subject. In our search for a solution of this important problem, we find that B. Farquhar Curtis has taught us much by his experimental work. He found that aside from

Digitized by Google

bruising and laceration of the parietal structures, there occurred in ten out of forty-four experiments on dogs, severe contusion of the intestine, threatening perforation, most of them having laceration of some coats of the intestine. In ten cases no injury was done. In two cases the cæcum was separated from the ileum, rupturing branches of the mesenteric artery.

"Laceration of the mesentery, so severe as to deprive this part of the mesenterium of its blood supply, in thirteen cases. In one case there was laceration of the mesentery, causing such profuse hemorrhage that life was endangered. The vessel was secured by ligature."

"Rupture of the intestine was caused in eight cases. In two cases there were two ruptures. Of these ten ruptures of the gut, four extended completely across it, and two almost across; of the rest three were directed in the long axis of the gut."

As to the cause of rupture of the intestine, permit me to refer you to the excellent paper by Curtis on this subject. From a series of experiments on the cadaver by him, he draws the following conclusions:

1. In contusion of the abdomen the intestine is ruptured by being crushed between the contusing body and the bony parts—the vertebræ and pelvis. The injury is therefore not a true rupture, but a contused and lacerated wound of the gut.

2. Partial distention of the gut, especially if a large part of the intestine is distended, diminishes the danger of rupture. If great distention of an isolated loop ever occurred in life, it would increase the danger of rupture, even for a loop not in contact with bony parts.

3. The most exposed position for the gut is in contact with the bony parts—in front of the vertebræ, near the brim of the pelvis (when hernia is present), and near the crest of the ilium.

4. There are many chances in favor of escape of the intestine from injury in contusion of the abdomen—there may be no gut lying directly at the point where the blow is inflicted; the gut may be partially inflated with gas; or may slip away from the pressure exercised by the blow. This fact is of great importance in its bearing upon the question of early performance of laparotomy for rupture of the intestine.

The relative frequency of injury to different parts of the intestine would lead us beyond the scope of this paper. For our purpose we can dismiss this question with the assumption that that particular portion of the intestine is most likely to be damaged which lies immediately under the site of the blow. The great danger from contusion or laceration of the intestine is peritonitis from fecal extravasation, in the case of perforation or laceration or perforation from localized gangrene, or the diminished vitality of the tissues, which allow various organisms to penetrate them and cause peritonitis. Aside from peritonitis, hemorrhage from laceration of the mesentery is the most frequent complication. It usually occurs from a rupture of one or more of the mesenteric blood vessels or the longitudinal intestinal arteries. When called to a case of horse-kick or contusion of the abdomen from any cause, we may often be compelled to act promptly and without delay.

In my search through the literature upon the particular point of diagnosis, I found about fifty cases, and from them I have attempted to make up the following symptomatology:

SHOCK in varying degrees was present in nearly three-fourths of the cases.

CONSCIOUSNESS was abolished in less than one-half of the cases.

RESTLESSNESS was noted in a small proportion.

VOMITING in the early stages is a common occurrence, and is noted in the vast majority; was also a late and severe symptom in about one-half of the cases. Beside the ordinary stomach contents, hemorrhagic material was observed in the ejecta of a few cases.

NAUSEA is nearly always present, even in those cases where there has been no actual emesis.

PAIN is an early and constant symptom in all cases, although it may be occasionally absent. The character of the pain will vary, may be acute, lancinating, colicky, continuous, or intermittent, and in severe injury grows worse; or it may be comparatively slight or even absent for two or three days, when it suddenly grows worse, which is usually a positive sign of perforation and the beginning of peritonitis.

TENDERNESS was present in nearly all the cases early, and was of great diagnostic value in locating the seat of the injury in many cases. I have found the report of one case (MacLean) where tenderness was practically absent after the first day, and yet death ensued, the autopsy disclosing a rent in the ileum which admitted three fingers.

TYMPANITIS occurred early in a few cases and later in the majority, and in all those where peritonitis supervened. A few fatal cases were recorded where no tympanitis was noted at any time.

ON PERCUSSION several cases of flat and "tense belly" are recorded, which, by some authors, has been regarded as symptomatic of perforated gut; many cases of laceration of a gut were found in which the above symptom was absent.

LIVER DULLNESS was reduced as soon as tympanitis began. This reduced area of dullness has been regarded as indicative of intestinal perforation or rupture, but should not be too much relied upon.

CONSTIPATION is an almost constant condition, which is relieved in a day or two if the lesion has been slight; and it is obstinate in direct proportion to the amount of intestinal injury; and in the fatal cases it was not relieved.

FECAL VOMITING is not a constant symptom, occurring early in a very few instances and late in a larger proportion. It is always a grave sign.

Digitized by Google

Temperature was found to be extremely variable, and was found of comparatively slight value except when subnormal or extremely high. As a rule the range of temperature was not great.

Pulse varied greatly, but often proved of great value. It frequently gave warning of hemorrhage and of peritonitis. A gradually falling temperature with a slowly increasing pulse-rate, decreasing pulse-volume, means hemorrhage. A gradually rising temperature, increased pulse-rate, the hard, wiry pulse, at once suggests peritonitis.

It is true that it is often difficult to distinguish between hemorrhage and shock, but, as a rule, shock is noted immediately after the injury, and the effects of the hemorrhage become manifest later.

Prognosis—The average duration of life in the fatal cases has been found to be forty-eight hours. In some cases the shock never leaves the patient, but he slowly falls into collapse, followed by death. In cases of hemorrhage and fecal extravasation, collapse and death may ensue in a few hours. When peritonitis develops, which often does, the outcome is nearly always bad. The prognosis is uncertain in that class of patients where the symptoms are vague. The suffering may be slight, the case apparently improving, but to the surprise of every one the slight tenderness has gradually developed into a peritonitis; our hopeful attitude has changed to a state of hopelessness.

Diagnosis—To sum up the foregoing, we find much depends on the nature of the blow, how and where inflicted, and by what particular object. In horse-kicks the striking object is small but hard and applied with great force, and when inflicted at a point where the gut lies between the point of injury and a bony prominence like the vertebral column, or iliac bone, we are very likely to have rupture of the intestine. If the site of the blow is over the liver or spleen, or bladder, our chief attention must be directed to these particular organs. Whether or not these organs have been lacerated or are the seat of hemorrhage, will depend upon such signs of internal hemorrhage as are indicated by an increasing rate and diminishing volume of the pulse, with a gradual lowering of temperature, or at least no direct proportionate temperature and pulse increase; especially if these symptoms become manifest after consciousness has been restored, or, in cases where no unconsciousness followed the accident, supervene soon after.

It has been shown that four-fifths of the cases of contusion of the abdomen recover, yet every case should be observed closely for the first twelve or twenty-four hours. We have noted that in all the cases of recovery the worst symptoms were noted immediately after the accident, but the improvement began in a short time and continued until complete recovery, some in a short time, others more slowly, exhibiting pain, fever, localized peritonitis, tenderness, vomiting, etc.

While shock is frequently present, it must not in itself be regarded as grave; as a rule it disappears, but if long-continued, may end in death. We may be puzzled whether we have shock pure and simple, or whether we do not also have hemorrhage; whether the primary shock symptoms may not have so overlapped manifestations of exhaustion from hemorrhage in such a manner that it will be difficult to state where shock ended and exhaustion from hemorrhage began. Here the judgment of the surgeon sustains its severest test. Right or wrong may determine life or death. Restlessness is nearly always an indication of severe internal injury. Vomiting, present in nearly all cases, when taken together with other signs, and if long-continued and persistent, means mischief. If the ejecta are feculant, which is not often, we must think of bowel obstruction or laceration. Vomiting, if not present early, but coming on late, means peritonitis.

Bloody stools always mean bowel injury. Constipation is the rule, which may be due to simple shock, or the bruising of one or more intestinal coats or all, or to bruising of the mesenterium.

Retention of urine is not uncommon, and when due to laceration of the bladder may be serious. Bloody urine, whether passed voluntarily or per catheter, always means vesical injury.

The physical signs in abdominal contusions are usually important; and while they are sometimes misleading, yet they aid us in no inconsiderable degree when carefully considered in connection with other symptoms. Localized tenderness is always important, and frequently points out the probable seat of injury, and is an indication as to the point of incision should one become necessary. Tympanitic resonance or dull percussion sound in an unusual place is sometimes an aid. The two important conditions, however, to be sought after are intestinal rupture and hemorrhage. If these can be excluded, we can afford to wait. If these two factors are absent, the majority of our cases will progress to convalescence, which is usually complete. Occasionally, however, recovery is not complete, as will be illustrated by the following cases:

Mr. A. E. P.; age 30; horseshoer. On June 10, 1894, while engaged in shoeing a horse, was kicked at a point directly below the left costal arch, and although he felt considerable pain, he finished shoeing the horse. The pain continued without much change until July 2, 1894, when he was seized with "cramping" in the stomach and bowels. After being somewhat relieved by anodynes, he procured a slight bowel movement by the aid of salines. Not feeling the relief he expected, he took more salts without effect, obtaining no evacuation in three successive days. After repeated doses of various cathartics, he applied to a physician, who used high enemas for two days more without effect. Then three doses of

Digitized by Google

croton oil were given, which finally procured the desired effect. After a rest of two weeks in bed, he went to work again, but the pain over the left colic flexure continued. His constipation persisted; nothing in the way of diet was effectual. Artificial means only produced an evacuation. A bowel movement always intensified the local pain so that he would be compelled to lie on his abdomen for nearly three hours before the pain became endurable. Any undue physical exercise always aggravated the pain. His condition remained about the same until March 17, 1895, when he was admitted to the Omaha Deaconess Hospital. On examination we found a young man of athletic figure, muscular and well developed. Beside the above history, we found on physical examination nothing except a point of extreme tenderness over the site of the left colic flexure; no thickening nor swelling could be made out. On March 19 we opened the abdomen in the median line for exploration. There was found an adhesion of the upper portion of the colon to the abdominal wall at a point immediately beneath the horse-kick. Severing the adhesion and separating the abdominal wound for inspection, there was observed a thickening the size of an ordinary hand in the abdominal wall at the margin of the quadratus lumborum. This thickening appeared to be between the peritoneum and the muscular layer. It was of a dark purple color, fluctuated on palpation. It appeared to be an effusion of blood. The median incision was closed and another made directly over the effusion and along the margin of the quadratus lumborum. A mass of clots and fluid blood was evacuated. The cavity was packed with iodoform gauze and the wound rapidly healed by granulation. The patient was discharged in a few weeks much improved. The remarkable feature in this case is that an effusion of blood should have remained so long without being absorbed, and particularly that clots should still have been present. The intestinal adhesion no doubt interfered with colic peristalsis in such a way that the fecal current was impeded. When the bowel was full he felt comparatively comfortable. The excessive pain when the colon was evacuated was no doubt induced by the tension and traction at the point of adhesion and fixation, while the bowel was in active peristalsis.

Our second case of old intra-abdominal injury from horse-kick is that of a farming implement dealer, age 35, rather slight build, but strong and wiry. About four years previous to his admission to the Omaha Deaconess Hospital, July 11, 1895, while riding horseback, the horse slipped and fell, he underneath. The horse while springing up stepped with one foot on the patient, striking immediately below the left costal arch, resulting in time in an ecchymosis the perfect imprint of the hoof. There was much intra-abdominal pain. He was confined to his bed for several days. There was some bloating, and obstinate constipation, which could only be relieved by the most active artificial means. In about a month he was able to attend to his business. The left subcostal tenderness never disappeared. About two years after his first accident he was kicked by a horse and thrown against the end of a binder tongue, striking at the point of original injury, and this mishap confined him to his bed less than a week, with pain, bloating, and an increase of the constipation. Since this last accident he had had continual pain, much aggravated on pressure and physical exertion. Constipation had been most obstinate and difficult to remove. He had lost much flesh. On physical examination nothing could be made out except extreme tenderness over the left colic flexure and extending downward on the descending colon. No enlargement or thickening could be made out. On July — the abdomen was opened in the median line. The omentum, together with a portion of the splenic flexure of the colon, was adherent to the parietal peritoneum. These adhesions were broken up. It was then found that the rather long descending mesocolon was folded upon itself and its folds adhered to each other, drawing the upper portion of the descending colon down. These adhesions were also successfully severed. This portion of the mesocolon was much thickened, and it was found that it undoubtedly did interfere with free peristalsis. The abdomen was closed and recovery has been complete. No disturbance has been realized from the thickened mesenterium.

Late effects from kicks upon the abdomen are infrequent. If a lesion of the hollow viscera has occurred, its effects are usually immediate or become manifest within a relatively short period of time. My own experience is limited to two cases. I have been able to find very little reference to this condition in the literature. To attempt to draw conclusions from so small material would be presumptuous on my part and could be of no practical value. I will therefore, for the present, refrain from burdening you with useless speculations, which can be of no practical value, and content myself with the hope that the conditions found in the last two may aid us somewhat in determining the course to be pursued in similar cases.

Note.—While we discharged our first case (under the head of late effects from horse-kicks upon the abdomen) as improved, being almost free from pain, we are compelled to record that, after a few months, all his former pain and distress returned, necessitating a second abdominal section. The old adhesions had reformed. They were severed and to prevent further adhesions the intestinal adhesion sites were covered with omental grafts. He was again discharged, relieved, but recently, about five months after his last operation, he writes me that his old pain has returned. In all probability adhesions have again formed, in spite of the omental grafts, and another abdominal section may be necessary.

Digitized by Google

HYPEREMESIS — PERNICIOUS VOMITING OF PREGNANCY, WITH REPORT OF A CASE.

By F. A. BUTLER, A. M., M. D.,
HARVARD, NEB.

In writing a paper upon this subject, I am well aware, after having searched the literature thoroughly while treating a severe case, the results obtained by most authors seem to have been unsatisfactory, a successful treatment in one case producing little or no results in another case. Some of the German authorities deny that such a thing exists as pernicious vomiting in pregnancy. Some vomiting and nausea, morning sickness, so-called, during gestation every woman expects, and every physician is frequently called upon to prescribe for this so-called sickness, with a view to its relief.

During seventeen years' active practice as a general practitioner, it has been my province to meet with many cases of disorders of the alimentary canal during gestation, but have never seen but one real severe case of pernicious vomiting in pregnancy that I was determined to bring through to a favorable result, if there was a possibility or the least shadow of a chance in doing so; but am fully satisfied that if called upon to treat a case at all similar to the one here reported, could not do so successfully. At least would be very loth to undertake to carry such a case through unless the patient was placed under my immediate care and supervision at my own residence. At the same time trust it may never be my lot to witness such suffering, for which there is so little relief, unless, according to all the authorities, that last inevitable proceeding which proves disastrous to the life of the child is promulgated. Permit me to say, in reporting this case from actual practice, witnessing all symptoms from day to day, month after month, that this is not an overdrawn picture.

The patient in question, 35 years old, married seven years, became pregnant about August 28, 1894. Everything seemed to progress favorably until the middle of the second month, when nausea became manifest and patient began to feel weak and languid, progressing worse until November 1, when vomiting of a severe character set in, the stomach rebelling against all forms of food, no matter what the nature, consistency, or kind. This continued regardless of all treatment. The various applications were given a thorough test, painting mouth of womb with iodine, and iodine, glycerine, and carbolic acid, and other applications were given a thorough trial, with no success whatever. Patient was put to bed in a well-ventilated upper chamber, surroundings made pleasant, visitors excluded. Vomiting continued; patient, who had been in good health and well nourished since maturity, became weak and emaciated. Aside from eating a few stalks of celery and drinking a bottle of pop twice in twenty-four hours, very little food was taken for six weeks, as nothing could be retained, vomiting continually the digestive fluids and frequently blood. When this had continued about six weeks, or to the middle of December, symptoms became ameliorated somewhat, patient did not vomit all the time, only a certain part of the day, and an occasional day without vomiting. More hope was entertained as to the final outcome of the case. This improvement lasted for about four weeks, patient being able to sit up at times for an hour or two, some days much more feeble than others. Small quantities of milk could be drank, containing pellets of ice. About the middle of January continued pernicious vomiting again reappeared. Patient was kept in bed. A number of physicians were called in (thanks to their timely assistance and advice). All the literature at my command was consulted on the subject. The stomach would retain absolutely nothing. The secretions of the salivary glands became greatly augmented; saliva constantly dribbling from the mouth; pyrosis and hiccough constant distressing symptoms. Retching became continuous, stomach becoming so irritable that neither food nor drink could be retained, no matter how small the quantity administered. Vomited matter mixed with blood; tongue red and shining; teeth and gums covered with sordes; breath fetid; skin dry and harsh; thirst and salivation constant; constipation present. Fever had developed; temperature 100; pulse 120 to 130. Patient and friends had given up in despair. Friends requested me to call assistance and produce a miscarriage. Physicians were consulted, all agreeing that unless means were used to support patient's strength she would die of starvation, and before I should lose the patient from inanition a miscarriage had better be produced. After considering the cause of the hyperemesis in this case (as all treatment to the uterus had produced negative results), due to nervous origin, it was decided to use strychnine hypodermically. One-thirtieth of a grain of nitrate strychnia (P. D.) was injected into the arm three times daily, the needle being made aseptic after and just before using again. At the same time alimentation per rectum was resorted to (following Dr. Halderman's timely suggestion in a paper read at the Beatrice meeting, 1890, on this subject to use a bag syringe), the bowel being cleared once or twice daily by copious water injections, and every four hours, day and night, four ounces of either pre-digested food, beef peptonoids (diluted), beef juice, or the juice or soup from the different kinds of game, without seasoning or milk, was administered, in the manner described. At the same time a half ounce of hot water three times daily, to keep the stomach from shrinking, was given by the mouth. This was everything and the only thing taken for eight weeks. Strychnia and injections of food, as stated, continued. About the middle of March patient began to gain; vomiting began to

Digitized by Google

subside; could take Kuymsgen and drink buttermilk, finally sweet milk, and rare beef, cut up in fine bits, heated through, without any seasoning, also bread and milk. Administration of food per rectum discontinued; strychnia was left off for three days. Nausea recommenced; hypodermics of strychnia was resorted to again, which controlled it as before. At this time, the seventh month of gestation, albuminuria and dropsy supervened to an alarming extent. Patient at this time could take a tablespoonful of cream of tartar once in twenty-four hours, which seemed to act well as a laxative. An infusion of digitalis and acetate of potassa was prescribed, but could not be borne. Dropsy increased until patient could breath only in a semi-sitting posture. As a last alternative hot baths were given (well knowing the tendency to produce a premature birth by doing so, but something had to be done). Patient was placed in bath tub at a temperature of 98; towels soaked in cold water were wrapped around the head; temperature of bath run up to 110 by adding hot water gradually; patient could not stand this but twelve minutes; was put to bed wrapped in woolen blankets; temperature of room 100. There is no estimating the amount of perspiration this produced; blankets, bed clothing, and everything literally saturated; also causing one of the most severe forms of headache. After a couple of hours the room was allowed to cool to the usual temperature, everything being changed before doing so. Patient slept well during latter part of the night. Aside from an exhausted feeling next day, was greatly relieved. In ten days was as bad as ever with the general anasarca. Another bath was given, as before, with the same results. Patient advanced eight months and a few days. Four days after the second and last bath was given, premonitory labor pains set in (patient could not take chloral to control them). These pains continued at intervals for three days, when real labor came on in earnest. Patient was chloroformed during the labor and everything conducted under a strictly aseptic regimen. Labor was without accident or incident, giving birth to twins, the second child being born one hour and twenty minutes after the first. They were small, thin, active little fellows, with large frames; weight, five pounds each; born twenty-one days prematurely. The mother and children were kept in a chamber with temperature of 98 for a few days, and not less than 75 to 80 for two weeks, mother making a quick and satisfactory recovery. A new perplexing problem arose. (The nurse would not follow directions regarding the temperature of the room, agreeing, however, to do so when threatened with dismissal.) Mother was able and had plenty of nurse for both of the children, who grew and thrived. Mother nor either of the children have seen a day's sickness during the year. As a result of this treatment and management, ladies and gentlemen of the Nebraska State Medical Society, we have two fine children, a boy and a girl, one year old, to bless and comfort our beautiful home.

CONCLUSIONS.—1. Albuminuria existed to a severe extent, notwithstanding the patient's diet last two or three months was almost an exclusive milk diet.

2. Patient having a susceptible nervous temperament, having had a severe and continued attack of chorea when a child, led me to believe the vomiting to be of nervous origin in this case, and not as presumed by many of the authors, that the "disease depends upon a pathological or physiological condition of the uterus" in all cases; hence the good results produced by the continued use of the strychnia hypodermically, used until three weeks after birth, making five months strychnia injected into the arm three times daily.

3. All applications made and medicines used only proved to aggravate instead of allaying the hyperemesis.

4. I know of some cases where abortions have been produced in consequence of exaggerated vomiting, done so too soon. More and persistent perseverance should be used in the treatment of these cases.

5. The administration of food per rectum sustained the patient's vital forces until the vomiting, of nervous origin, could be controlled by the greatest of nerve tonics, strychnia.

6. Children born prematurely cannot be cared for too assiduously regarding nourishment and temperature of chamber in which they are kept. The little child becomes cold easily and if so is almost sure to die. I know of many little ones who have perished from this cause alone, due to neglect, ignorance, or incapability of the nurse.

A NEW HUMAN TAPEWORM.*

(*Tænia confusa* n. sp.)

BY HENRY B. WARD, PH. D.,

PROFESSOR OF ZOOLOGY, UNIVERSITY OF NEBRASKA.

Somewhat more than a year ago a tapeworm was sent me which at first sight appeared decidedly unlike either *Tænia saginata* or *Tænia solium*. It showed the slender form and more delicate appearance of the latter, but was in length of segments even decidedly larger than the former species. Some notes were made at the time, and then, on account of pressure in other directions, laid aside to await opportunity for further study. This winter I received a second specimen which at once recalled the first, and on comparison was seen to be identical with it. A series of measurements was made from the entire length of the specimen, and comparison with those given for the familiar species in Leuckart† strengthened the belief that this was an unknown form of the

* Read before the Nebraska State Medical Society, Lincoln, 1896.
† Parasiten des Menschen, II. Aufl. Leipzig, 1879-93.

Digitized by Google

genus. One of my students is at present engaged in a detailed description of this specimen, and closer study shows beyond question the specific rank of the form. It seems proper, however, that, in advance of this detailed study, some general description of the form should be published, in order to call attention to the existence, in this region at least, of a species hitherto unknown or confused with one of the familiar species. We are especially desirous of obtaining more material, and take this occasion to beg that specimens of tapeworm be sent from all regions for identification and study. The University will gladly pay the cost of transportation on such material.

Thus far only two specimens of this species have been seen, and both were taken from residents of Lincoln. One of them has been almost entirely destroyed in making slides and sections, but the other is still nearly entire, and from it were taken the general measurements which are given in the following. The total length of this specimen must have been about 500 cm. The terminal proglottids, just ready to be separated, are from 5 to 3.5 mm. in width. They are, as represented in figure 1, of nearly uniform breadth

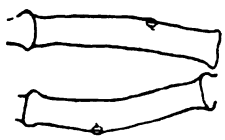


FIG. 1.—Two segments from end of chain, *Tænia confusa* n. sp. Natural size.* (Original.)

throughout their entire length, save that close to the end a prominent widening is found, to which the subsequent proglottid is attached. The sexual pore is easily seen, though it does not project markedly beyond the margin of the segment. One meter anterior to the end of the specimen the proglottids measure 15 mm. long and 7.5 mm. wide, and a meter further anterior they are just about 9 mm. square. In the anterior third of the worm the segments are 4.5 mm. long by 3.5 mm. wide, and near the anterior end 1 to 1.2 mm. long by 0.8 to 1 mm. wide. In general, then, it may be said to be much slenderer than *Tænia saginata*, never attaining the broad form which is so striking near the middle of the chain in specimens of this latter species. Cross sections show that the new form is much less muscular, and in fact more like *Tænia solium*, from which it differs, however, in many evident respects. A positive diagnosis of the species may be made from these terminal segments alone, by the size and shape, which, as the table appended to the article shows, are sufficiently unlike corresponding parts in the two familiar forms of *Tænia* to be distinguished without great difficulty.

The most striking peculiarity of the new species, however, is the head. Unfortunately, this was present only in one specimen. The long, very slender neck has no region which fails to show the boundary lines of the proglottids. It is crowned by a small head (Figure 2), which meas-

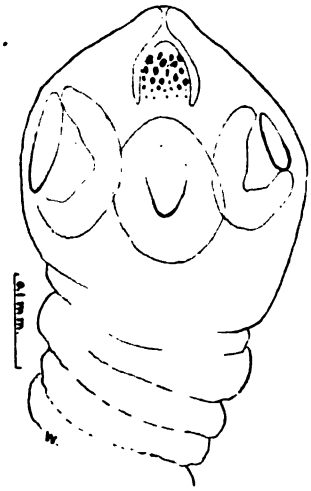


FIG. 2.—Head of *Tænia confusa* n. sp. Highly magnified, × about 125. Drawn with Abbe camera. Leitz Oc. 2, Obj. 5. (Original.)

ures only 0.3 mm. in diameter. The four suckers are distinct, but not prominent, and produce no apparent break in the outline of the head. Most striking, however, even under a low power, is the rostellum, which lies drawn into a pit at the anterior apex of the head. It is thimble-shaped and measures 0.05 mm. wide by 0.07 mm. long; it is covered by six or seven close rows of minute hooks, which decrease in size from the apex of the structure toward the base. Owing to the thickness of the muscular mass about the hooks and to their diminutive size, it was not possible in the single specimen to determine exactly their size and shape. One recognizes, however, without difficulty, the clear, highly refractive appearance characteristic of such chitinous structures. The diminutive size of the head led me at first to suspect that it was altogether lacking in this specimen. It is probable that the rostellum, with its mass of hooks, gives a firm hold on the intestinal wall of the host, and the parasite may be evacuated only with great difficulty. Accurate diagnoses and records of methods employed in removing the worm are necessary to determine the effect of the ordinary remedies on this new species. It is by no means certain that it will yield to the same treatment as the well-known species.

A table of measurements for the three species of *Tænia*, which are found as adults in the human alimentary canal, is appended for convenience in diagnosis. The measurements for the familiar species are taken from Leuckart. The specific name *confusa* is proposed for this new form.

	T. confusa.	T. saginata.	T. solium.
Length of entire specimen...	5 m.	4–8 m.	2–3 m.
Length of terminal proglottids	27–35 mm.	18–20 mm.	10–12 mm.
Width of terminal proglottids	5–3.5 mm.		
Greatest width of chain.....	8–9 mm.	12–13 mm.	7–8 mm.
Diameter of head.....	0.3 mm.	1.5–2 mm.	1 mm.
Diameter of suckers.....	0.12–0.15 mm.		

ZOOLOGICAL LABORATORY,
THE UNIVERSITY OF NEBRASKA.

Lincoln, June, 1896.

* By error in reproducing this figure the segments are only nine-tenths natural size.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.

Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.

Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance, ... $2 00

Single copies 20

Address:

WESTERN MEDICAL REVIEW,

LINCOLN, NEBRASKA.

LINCOLN, NEBRASKA, JUNE 15, 1896.

THE last meeting of the Nebraska State Medical Society was one of the most profitable and enjoyable meetings the society has ever held. While the social features were not elaborate or varied, they were, nevertheless, enjoyed by all. The banquet on the evening of the 20th was a very pleasant function, and the menu, as well as the post-prandial speeches, were a source of enjoyment for all who were present. It was a happy thought to have the banquet the second night of the session, and not wait till the last night, as is the usual custom. While it may be a good idea to have it on the last night so as to get the members to stay, it is proven that in this regard it is a failure. There are very few who are willing to stay over a night just for the sake of a banquet, even though there may be good speeches thrown in.

THERE is always a tendency to allow things to drag at the beginning of these meetings, and this one was not an exception. If there had been as much promptness and energy put into the early as there was into the latter part of the meeting, there would have been no reason for so many having to go home without reading the papers on which they had put so much time and energy in preparing. There was probably too much hurry during the last half day, and each one was impressed with the fact that he must not discuss a paper, because there was no time. The discussion of a paper is often of more interest and importance than the paper itself, and yet few had the courage to get up and take the time for discussion during the last few hours of the session. There is a happy mean between the dilatoriness of the early part of the session and the rush of the closing hours. Less time taken for the intermissions and promptness on calling to order, even though but few are present, are two elements of economy of time that it would be well for all such gatherings to make use of.

THERE were two or three important matters on which action was taken. One of these was the publishing of the proceedings in book form only, and allowing the readers of papers the privilege of publishing their papers where they please. This is, no doubt, a good change. While it may be cheaper to publish the proceedings in a journal,—and not very much cheaper, either,—this method prevents the authors of papers from publishing them elsewhere. And while it gives a medical journal a certain amount of prestige to call itself the organ of a society, it compels the publication in its pages of articles that are not worth the paper on which they are written. This last argument would not apply to papers read this year, but there is many a paper inflicted on a society with which but few journals would want to inflict their readers.

THE resolution introduced for action next year making the place of meeting perpetual at Lincoln has much that can be said in its favor, and not a little against it. Probably, though, it would be better to leave this for discussion till next spring, before the meeting of the society. Missouri is discussing the advisability of adopting the same thing, and Dr. Hall, president of the State Medical Association of that state, favors a permanent home for the society at Sedalia, "the future capital."

NEXT year the society is to be divided into two sections, medical and surgical. Just how the division is to be made so that it will give perfect satisfaction is hard to tell. Whether the idea will be "welcomed gladly" by the average attendant at the State Society is an open question. If all were specialists it would be all right, but at present there are a few general practitioners left who have to cover the whole field, and who want to brush up generally. And yet, something must be done. With as large an attendance and as much material as there was at this last meeting, and both gradually increasing, there is probably no other way to thoroughly use up all the good things.

THERE is a good deal of sound common-sense in that part of Dr. Summers' address printed in this issue which refers to medical societies.

Digitized by Google

Probably only one in eight physicians of Nebraska belong to the State Medical Society. Why is it? Is it because those who do not belong know it all? Is it because they are too busy? And yet the leading men in the profession belong to and support the different societies. The busiest physicians are the ones who are most in evidence at these gatherings. There are physicians who have been in practice for ten, fifteen, and twenty years who have never attended a medical society. And, by the way, the same men, too, never subscribe for a medical journal. Such men ought to be envied. They know it all, or think they do, and that is all the same to them. "Ignorance is bliss," we are told, and that being the case, it is certainly a folly to be wise.

If there were more mixing up, more social intercourse, more meetings held, not only state, but district, county, and city, there would be less of that jealousy which is a disgrace to our profession, and there would be more downright pleasure and enjoyment for us all. If you do not belong to your state society, join one; and if you do not belong to your local society, get into it and work. If there isn't one, go to work and organize one. If you do not need the help that obtains from professional intercourse with your fellow practitioners, if you know it all, be generous, attend the society meetings and help your fellows. They need your help if you do not need theirs.

MEDICAL EDUCATION AGAIN.

The subject of medical education is an old one. In fact, it has reached that age that it might almost be called a "chestnut." Still, the discussions that have taken place, the work that has been done, whether by individuals or organizations, has resulted in a wonderful change from that which existed a decade ago. Then the average medical college demanded only two years of five or six months each, while to-day the same schools have adopted four years of seven or eight months. So, taking it all together, those who have been working for the elevation of the standard of medical education in this country have much for which to be proud and for which to be thankful. But this is only a beginning. The next object to be striven for is to force all colleges—the majority of the better colleges need no compulsion in this matter now—to demand a higher standard of education before entrance. And the only way to do this is to compel the student to obtain an academical, high school, or some definite degree; or adopt the New York system—which is the European system—and have some outside body pass upon the qualification of the would-be medical student.

There is no excuse now, with the free high schools, colleges, and universities, for anyone not to have a thorough preliminary education, and when this shall be brought about, when the medical student shall be thoroughly grounded in general education, the vocation of the low-grade colleges and diploma mills will be gone. A well-educated youth knows too much to throw away his time at a school which has neither advantage nor standing. It is only the uneducated who patronize the low-grade schools that are, alas! too promiscuous even at this late date, especially in the west. The present laws of Nebraska, Colorado, Iowa, and many other states are away behind the demands of the times, not only in this regard, but others, and it will take united work to get the right kind of laws passed. And not only united work among the physicians of each school, but the united effort of all schools. The dominant school can afford to give way some to the weaker, for in this respect what is an advantage to one is an advantage to all. A little more liberality on all sides would result in good for each and all. With a united front the physicians of any of these states can ask for and get in the way of medical legislation anything they want. The political influence of the medical profession is greater than even that of the legal profession, provided they unite and work for a common purpose. But, alas! this seems to be an impossibility, or, at least, it has seemed to be in the past. But the bitter animosity that used to exist between the schools is becoming more and more a thing of the past, and it does seem as though the time was ripe for united effort of the different schools to bring about that which has been so long sought. The states that are not keeping up in the way of medical legislation are becoming the dumping grounds for the ones that do.

Another case of death from anti-toxine is reported, this time from Wheelersburg, Ohio, which occurred March 22d. The physician, who had had considerable experience in its use, injected the usual prophylactic dose, and in less than five minutes the child, a boy of five years, was dead. An hour before he was in good health. The injection was made over the scapula, and with the usual precautions. Do not the reported fatalities

Digitized by Google

show that the great danger lies in the use of the serum when the system is free from the diphtheria poison?

THE last General Assembly of Iowa amended the law relating to the State Board of Health, the medical members of which constitute the medical examining board, so that hereafter no member of a faculty of a medical college shall be eligible to membership on the Board. This is the first time such a law has been passed in any state, and it has created considerable feeling there. While it looks very much like discrimination against a certain class, there is no denying the fact that the less the medical colleges have to do with deciding on the qualifications of physicians, the sooner we may expect a better class of medical men turned out of our colleges. The select few who have been connected with our medical colleges have heretofore had all the authority in the matter, and now it would be only fair play to let the other side have a little to say.

A LAW was passed in Connecticut last year that makes it look as though some of the physical reformers were making their influence felt among the legislators of that state. Hereafter no man or woman who is an epileptic, imbecile, or feeble-minded can marry or live together as man and wife when the woman is under forty-five. The penalty is imprisonment for not less than three years. And any person who shall aid or assist or in any manner countenance such a thing will be fined not less than $1,000, or be imprisoned for not less than one year, or both. The same punishment follows if carnal intercourse takes place out of wedlock. Now if the same law should be made to apply to syphilitics, confirmed drunkards, and criminals, it would look as though there were some hope of reforming the race from a physical standpoint.

DR. A. J. C. SKENE, of Brooklyn, is reported as being engaged in writing another book, this time not on gynecology, but in the sister field, fiction. Whether the book will show up the foibles of woman, or take up psychological problems, as Dr. Holmes, Elsie Venner, we are not informed.

AT the commencement of the Nebraska State University this month nineteen of the seventy-five students who graduated will enter medical colleges this fall. The "crowding of the profession" would not be so bad if all who entered were as well prepared to commence the study of medicine as these are.

Notes and News.

DR. F. M. MINGUS has removed from Hubbell, Nebraska, to St. Joseph, Missouri.

THE *Buffalo Medical Journal* for June is gotten up by women, and is in every way creditable.

DR. G. W. JOHNSON, for some time superintendent, of the Hastings, Nebraska, asylum, from which he resigned some months ago, has located in Geneva, Nebraska, and will re-enter practice.

A FRENCH gynecologist has reported the case of a woman who had been in the habit, for more than twenty years, of using a lemon in lieu of a pessary. The effect was quite satisfactory, and no harm appeared to follow the practice.

AT the last meeting of the Medical College Association, Dr. James M. Bodine, of Louisville, Kentucky, was elected president, and Dr. Bayard Holmes, of Chicago, re-elected secretary. No important changes were made in the standard of requirements as already announced by this association.

ACCORDING to the *Western Medical Journal*, there is a decided feeling among the profession in Kansas in favor of earnest effort for a medical law for that state. Kansas and Texas are about the only states that tolerate all the fakirs and quacks that want to get in their work, without fear of the law.

DR. GEORGE R. MURRAY, who first instituted the treatment of myxedema by thyroid feeding, gives a further report of his first case in the *British Medical Journal*. The patient was a woman, age forty-six, who had had myxedema for four or five years. The treatment was begun in 1891 and has been continued ever since. The patient is still perfectly well.

DR. CHARLES A. L. REED, of Cincinnati, has been appointed by the European committee on organization of the International Periodical Congress of Gynecology and Obstetrics as honorary president of the meeting of that body. This is a richly deserved honor, and also a compliment to American gynecologists. The meeting will be held in Geneva, Switzerland, the first week in September, and in consideration of the compliment conferred every gynecologist and obstetrician of this country who goes to Europe this summer ought to make it a point to attend.

"NOW," said the physician, who is noted for his heavy charges, "I must take your temperature." "All right," responded the patient, in a tone of utter resignation. "You've got about everything else I own. There's no reason why you shouldn't take that, too."

Digitized by Google

Society Proceedings.

NEBRASKA STATE MEDICAL SOCIETY.

Abstract of Proceedings of the Twenty-eighth Annual Meeting, Held at Lincoln, May 19, 20, 21, 1896.

The twenty-eighth annual meeting of the Nebraska State Medical Society was called to order by the president, Dr. J. E. Summers, Jr., of Omaha, at 5:30 P. M. Tuesday, May 19, with about thirty members present.

Matters of minor importance were attended to and the society adjourned to 8 o'clock P. M., at which time the president delivered his annual address. (See page 25.) This was referred to a committee consisting of Drs. W. M. Knapp, G. W. Johnson, and W. O. Bridges, which was to report later in the session on the subject-matter presented in the address.

Dr. W. R. Lavender, the corresponding secretary, then read his report. In this he recommended the abolition of the office of corresponding secretary, and advised that the office of librarian and corresponding secretary should be held by one person, and that he should reside at Lincoln, as the library of the State Medical Society is placed in the library of the State University. He also advised the earlier appointment of the chairmen of the different sections than in the past, as such an arrangement would enable the chiefs of sections to invite papers, etc., from the members at large on some selected and important subject in that particular section and undoubtedly increase its value at our annual session. This report was referred to the same committee as the president's address.

Dr. George Wilkinson, of Omaha, the secretary, made his report. As secretary of the committee on publication, he stated that the transactions of this society have all been published. There yet remain a number of the volumes of 1893 and 1894 not yet distributed. With reference to the work of 1895, the proceedings have all been published in journal form. There remain the volumes to be bound—fifty for the use of the society and those for members who order of the publisher. He recommended that this binding should be done at once. This report was also referred to the committee on president's address.

Dr. W. M. Knapp, of Lincoln, the treasurer, made his report for the year, which was as follows:

	Dr.
Balance on hand, as per report 1895....	$190 82
May 22, Received from secretary, fees eight new members.....	40 00
Received from members during the year on dues.....	250 25
Total receipts.....	$481 07

1895.	Cr.
May 22, By amount voucher No. 1.....	$50 00
July 11, By amount voucher No. 2.....	25 55
Oct. 7, By amount paid on voucher No. 3.	100 00
Dec. 10, By amount paid on voucher No. 3....	35 00
1896.	
Jan. 13, By amount paid on voucher No. 4.....	58 34
Total paid out.....	$268 89
By balance.....	212 18
	$481 07
1896.	Dr.
May 19, To amount on hand.....	$212 18

This report was referred to the auditing committee.

It was ordered that the report of the special committee on the president's address and report of the corresponding secretary and recording secretary be made a special order of business for 7:30 P. M. Wednesday.

The report of the committee on necrology was read by the secretary and was adopted by rising vote. The following is the report:

REPORT OF COMMITTEE ON NECROLOGY.

Mr. President, and Members of the Nebraska State Medical Society: Your committee on necrology would beg leave to report the death of three members, within the last year, with the following brief biographies:

M. W. Walton, M. D., was born the 5th of May, 1842, at Thornton, Indiana, and died of apoplexy, July 11th, 1895, at Beatrice, Nebraska. His literary education was obtained at Freeport, Illinois, whence his parents had removed while he was in his twelfth year, and at Madison, Wisconsin. He took his medical degree from the Chicago Medical College, in March, 1868. He first located in Stephenson county, Illinois, where he remained till 1879, when he went abroad, spending two years in clinical work in Germany and France. On his return to America he located in Chicago, Illinois, whence he came to Beatrice, in 1885. While a resident of Illinois, he was a member of the Illinois State Medical Society, and delegate to the American Medical Association. At the time of his death he was president of the Gage County Medical Society. Dr. Walton was well liked by his fellow-laborers in the profession and enjoyed the confidence of the people to such a degree that his practice was large and remunerative.

Metha Helfritz Jonas, M. D., was born, January 23d, 1857, in Arlington, Wisconsin, and died in Johns Hopkins Hospital, October 28th, 1895. At the age of nine years her parents located at St. Ansgar, Mitchell county, Iowa, which was her home, till she came to Omaha, in 1889, as the wife of A. F. Jonas, M. D., and where her burial was attended and mourned by a host of friends and admirers. She manifested a thirst for knowledge at a very early age, and not satisfied with a common school education, at the age of fifteen, spent a year in the University of Wisconsin. Owing to pecuniary inability on the part of her parents she was obliged to leave college, and for some years devoted herself to teaching and other useful employments that brought revenue, till 1882 she entered the University of Iowa and took the degree of A. B. in 1886, and later that of A. M. on examination. She then studied medicine, and graduated from the Woman's Medical College, Chicago, Illinois, in the class of 1889.

After locating in Omaha she became a member of this society, and also of the Omaha Medical Society and of the Missouri Valley Medical Society, in all of which she was interested, and to which she contributed valuable material. She was intensely devoted to her profession, was a conscientious, careful, safe practitioner, especially in diseases peculiar to

Digitized by Google

her sex, while few, if any, could excel her expertness as an assistant in the operating room.

Dr. Jonas was a student in other fields besides that of medicine, and was constantly adding to herself attainments which fitted her for wider usefulness. In microscopy she was an expert, and was thoroughly up in pathological and histological laboratory work. She was an accomplished musician, and in her leisure moments took up photography, and succeeded in developing many meritorious productions.

For many years Dr. Jonas was an intense sufferer from pelvic disease, which was borne patiently and uncomplainingly, till released by death, following a surgical operation, at the time and place above mentioned.

AURELIUS BOWEN, M. D., was born January 30th, 1817, at Reading, Windsor county, Vermont. His father, Silas Bowen, was a physician of Welsh descent. Aurelius received his literary education at Bennington, Vermont, and April 10th, 1846, married Miss Isabella Forbes, of Windsor. He graduated in medicine in 1851, from the Castleton Medical College, Vermont, an institution long since suspended. He first settled in northern Illinois, but in 1855 went to Kansas, where he took part in the exciting scenes attendant upon the organization of that state. His sojourn there, however, was not of long duration, for we find him located in Nebraska City, Nebraska, in 1856, where he was ever afterward a prominent, honored citizen, and successful practitioner.

Subjected to influences that developed a scholarly and cultured physician in New England, he was always true to his convictions and maintained them even at times when nerve and muscle were more serviceable than culture. Though irascible, pugnacious, and energetic, he was humane, generous, and dignified, and his support was given to every enterprise that promised to add to the common happiness of his city and state. He was state senator from the third district of Nebraska, 1873-74, and was the author of the bill for an institute for the blind in Nebraska City. He was one of the incorporators of the deaf and dumb institute, located at Omaha, named in the act incorporating that institution February 7th, 1867, and was a member of the board of trustees from that date to 1875.

During the late civil war he was surgeon of the Second Nebraska Cavalry; was at the battle of White Stone Hills in the Sioux war, in 1863, under General Sully, and received honorable mention; was medical director of the district of Nebraska, and after the war, up to 1880, was United States examining surgeon. As his ancestry served in the Revolutionary war, he was a member of the Society of the Sons of the Revolution.

In his chosen profession, Dr. Bowen was always to the front. He joined the Nebraska State Medical Society at its first annual meeting in Nebraska City, 1869, and was chairman of committee of arrangements at its last meeting held in Nebraska City, May, 1893; thus completing more than a quarter century of continuous and active membership. No member took more interest in the society's prosperity, as was attested by his frequent presence at its meetings, and his contributions from time to time. He was honored with the presidency in 1872-73. He was also an active member of the Otoe County Medical Society, and also of G. A. R., Wm. Baumer Post No. 24, of Nebraska, under whose auspices he was buried at Nebraska City. His death occurred on the 5th of August, 1895, at the asylum for the insane at Lincoln, where he had been removed for treatment and care, in consequence of loss of mind following general paresis.

Your committee regrets that the above biography is not as complete, perhaps, as it should be, realizing that a "great man has fallen in Israel," but it is the best that could be procured in the limited time at their command.

J. C. DENISE.
M. L. HILDRETH.
D. A. WALDEN.

An invitation was received from Dr. Abbott, superintendent of the insane asylum, to visit that institution, which was accepted and the hour fixed between 12 and 2 o'clock P. M. on Wednesday. Also, invitation was accepted from Professor Brace to witness experiments with the Röntgen rays at 9 o'clock P. M. on Wednesday at the State University.

MORNING SESSION—MAY 20.

Meeting called to order by the president at 9:30 A. M., and the reading of papers was immediately taken up, the following papers being read:

Dr. W. O. Bridges, "The Significance of Blood Examinations in Disease."

Dr. W. Ross Martin, Omaha, "Anterior Poliomyeletis."

Dr. H. M. McClanahan, Omaha, "Infantile Scorbutus."

Dr. G. A. Meredith, Crawford, "Notes of a Case of Suspended Volition and Locomotion."

Dr. A. N. Loper, College View, "Dyspepsia."

Session adjourned until 2 P. M. and a large number of the members visited the asylum during the intermission, where they were elegantly entertained by Dr. Abbott and his able assistants.

AFTERNOON SESSION—MAY 20.

Meeting called to order by the president, Dr. Summers, at 2:30, and the following papers were read and discussed:

Dr. H. P. Hamilton, Omaha, "Reports of Two Peculiar Cases, with Remarks on Each."

Dr. B. F. Crummer, Omaha, "Some Points in the Management of Empyema."

Prof. H. B. Ward, Lincoln, "An Entozoon, Probably of Order Cestoidea."

Dr. W. A. Chapman, Hastings, "Report of One or More Cases."

Dr. V. H. Coffman, Omaha, "Injections of Carbolic Acid in the Treatment of Hydrocele," etc.

Dr. J. H. Miller, Gering, "A Case of Stricture of the Œsophagus."

EVENING SESSION—MAY 20.

The society called to order at 7:30.

The report of the committee on president's address, etc., being the special order for this time, this matter was taken up and the chairman of the committee, Dr. Knapp, read the following report, which was read section by section, and after considerable discussion as to the merits of publishing the proceedings in a journal or in book form, it was finally decided to adopt the full report of the committee and therefore to publish the proceedings in book form:

MR. PRESIDENT, AND MEMBERS OF THE NEBRASKA STATE MEDICAL SOCIETY: Your committee on the address of President Summers and the reports of the recording and corresponding secretaries report favorably upon the following recommendations:

1. That the committee on medical legislation be requested to confer with like committees from the other state medical societies, to the end of agreeing upon a medical bill to be presented at the next session of the legislature, which shall at least require that only such diplomas shall be recognized by our state board as are issued by medical schools in good standing, requiring at least attendance upon four courses of lectures of

Digitized by Google

not less than six months each, no two in the same year.

2. That the transactions of the society be published in book form, such publication to be issued within three months after adjournment of the session, and that a resolution be passed permitting the publication of any paper where the author desires.

3. That the president appoint and notify the chairmen of sections within three months after his election, that they may have sufficient time to prepare the section work.

4. That the offices of librarian and corresponding secretary be united and elective; that said officer be a resident of Lincoln.

W. M. Knapp,
Except second recommendation.
W. O. Bridges.

The auditing committee, consisting of Drs. H. Gifford, J. V. Beghtol, and E. N. Smith, reported the accounts of the secretary and treasurer correct and satisfactory, which report was adopted.

The society then proceeded to the election of officers and Dr. F. D. Haldeman, of Ord, having received the highest number of votes on the informal ballot, a motion was made and carried that he be declared the president by acclamation.

It being 9 o'clock, the society adjourned to Science Hall of the State University, where Professor Brace delivered a very interesting and instructive lecture on the Röntgen rays, exhibiting its use in various forms, especially as applied to surgical uses. After the lecture the society adjourned to the Lindell Hotel, where a banquet, tendered by the Lincoln Medical Society to the State Society, was enjoyed by about 175. Toasts were responded to in a happy manner by the following:

THE BANQUET.

The tables were set in the form of a hollow square and looked very pretty, covered with palms and potted flowers. The customary excellent service of the hotel was noticeable in the care taken of the guests. The menu consisted of five courses. During its service the Philharmonic Orchestra furnished some good music.

Dr. M. H. Garten acted as toastmaster. The toasts responded to were:

"The Pleasure of the Host"—H. B. Lowry, M. D.

"The Pleasures of the Guest"—B. F. Crummer, M. D.

"The Lincoln Medical Society"—A. R. Mitchell, M. D.

"The Specialist (Rip Van Winkle, M. D.)"—Professor Williams.

"The General Practitioner"—F. A. Butler, M. D.

"Real Microbe Life"—A. T. Peters, M. D.

"Science and Medicine"—Prof. H. B. Ward.

"Legal Legislation"—F. D. Haldeman, M. D.

"The Doctor and the Laity"—J. L. Sutherland, M. D.

MORNING SESSION—MAY 21.

Meeting was called to order by Dr. Lloyd, in the absence of the president. The continuation of the election of officers was the first thing taken up. Dr. Sutherland was elected first vice president, Dr. O. Grothan was elected second vice president, Dr. Lowry was elected corresponding secretary and librarian, Dr. G. H. Simmons was elected recording secretary, and Dr. Knapp was re-elected treasurer.

A vote of thanks was tendered to the committee of arrangements and to the Lincoln Medical Society for the manner in which the members of the State Medical Society had been entertained. A vote of thanks was also tendered Dr. Brace for the exhibition of the Röntgen rays and his interesting lecture thereon.

Lincoln was selected as the next place of meeting.

A resolution was adopted recommending Dr. Beghtol's reappointment as one of the secretaries of the State Board of Health.

An amendment to the by-laws and constitution, to be acted upon next year, was introduced, making Lincoln the permanent place of meeting for the State Society.

Dr. Stone offered the following resolution, which was adopted:

"*Resolved*, That this society again, for the third time, places itself upon record as favoring the passage of such measures by our state legislature as will cause expert testimony to be called by the court and not by the attorneys, and the society instructs its committee on medical legislation to urge this measure at the next legislative session."

The reading of papers was then taken up. Dr. Salter, Norfolk, read his paper on "Syme's Operation;" Dr. J. P. Lord, Omaha, "Report of Surgical Case;" Dr. Parkhurst, Dunbar, "Recurrent Appendicitis;" Dr. Georgiana Grothan, St. Paul, "Chloroform in Labor;" Dr. J. Lee Sutherland, Grand Island, "Practical Asepsis in Obstetrics." All papers on the program not read are considered read by title.

AFTERNOON SESSION—MAY 21.

Meeting called to order by Dr. Butler.

Drs. Beghtol and Christie were appointed a committee to introduce the newly elected officers, who were duly installed for the ensuing year.

The following papers were then read:

Dr. F. A. Butler, "Pernicious Vomiting of Pregnancy; Report of a Case."

Dr. A. D. Wilkinson, of Lincoln, "Phlegmasia Dolens."

Dr. Henry B. Wilson, of Omaha, "Spastic Paraplegia; Report of a Case."

Dr. S. E. Cook, of Lincoln, "The Ocular Symptoms in Bright's Disease."

Dr. W. R. Lavender, of Omaha, "Marrow Changes in Pernicious Anæmia," etc.

Digitized by Google

Dr. O. Grothan, of St. Paul, "The Role of the Staphylococcus," etc.

Dr. H. Gifford, of Omaha, "An Unfortunate but Instructive Case of Middle Ear Disease."

Dr. J. E. Lamb, of Wahoo, "Micro-organisms and Disease."

The following resolution was adopted:

"*Resolved*, That the sections for the future meetings of this society be divided into two, all subjects surgical be one and all others—medical, obstetrical, nervous, etc.—be the other, and that these sections be presided over by either of the vice presidents. In case of their absence, the president shall appoint a chairman at the executive session, which shall be the first order of business on assembling each morning."

Society adjourned *sine die* at 5:30 P. M.

NOTES.

Twenty-two new members joined during the session.

There were about two hundred members present during the meetings.

Members of the Nebraska State Medical Society who have moved during the last year will please notify the secretary of their present address at once, so that the correct addresses may be inserted in the proceedings.

There are quite a number of bound copies of the proceedings of the Nebraska State Medical Society for 1891-92 and 1893-94 in the hands of the secretary, which he would be glad to forward to members desiring them on receipt of fifteen cents for postage.

The members of the State Medical Society who read papers before that body, and those whose papers were read by title, are requested to forward the same to the secretary as soon as possible, that arrangements for printing the proceedings may be proceeded with. Geo. H. Simmons, secretary.

Dr. J. E. Summers, late president of the Nebraska State Medical Society, requests the publication of the following letter, which came too late to be read before the meeting of the society: "St. Louis, May 19th, 1896.—Dr. J. E. Summers, Pres. Neb. State Medical Society—My Dear Doctor: I have been instructed by the executive committee of the Mississippi Valley Medical Association to invite the members of the Nebraska State Medical Society to attend the meeting of the Mississippi Valley Medical Association which is to be held in St. Paul on October 20, 21, 22, and 23. I shall be greatly obliged if you will make this public at the meeting of the society. Very truly yours, Hanau W. Loeb." The members of the State Society can imagine this invitation accepted and act accordingly. A little more visiting of the different societies backwards and forwards would not be a bad idea.

Proceedings of the Nebraska State Board of Health.

MEMBERS—Dr. J. V. Beghtol, Friend, President; Dr. C. F. Stewart, Auburn, Vice-Pres.; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.
Board meets first Thursday of each month at the state capitol, Lincoln.

The Nebraska State Board of Health, at its meeting held May 7th, granted certificates to the following: Ernest J. C. Sward (R.), Oakland, Neb.; George T. Clements (R.), Clarkson, Neb.; Louis Swobada (R.), Omaha, Neb.; Reuben Robinson (R.), Omaha; Mary A. Quincy (R.), Omaha; P. E. Koerber (R.), Loup City; all graduating at the Omaha Medical College, 1896. Carl A. Hoffman (R.), Omaha; A. E. Stuht (R.), Omaha; Alonzo E. Mack (R.), Omaha; Chas. H. Brewer (R.), Omaha, and Joseph P. Percival (R.), Weston, Neb.; graduating at the Creighton Medical College, Omaha, 1896. Geo. H. Birknell (R.), Omaha; Omaha Medical College, 1895. Avery C. Hancock (H.), Hartington, Neb,; Kansas City Homeopathic College, 1896. Mary B. Hancock; same. Clarence C. Drummond (E.), Firth, Neb.; medical department Cotner University, 1896. Randolph F. Pries (R.), Omaha; California Medical College, Oakland, Cal., 1880. C. E. Rogers (R.), Omaha; University Medical College, New York, 1868. Chas. V. Bedell (R.), North Platte, Neb.; College of Physicians and Surgeons, Keokuk, 1882. Luke Fox (R.), Nelson, Neb.; Detroit College of Medicine and Surgery, Detroit, 1895. Mary B. White (H.), Beatrice, Neb.; Hahnemann Medical College, Chicago, 1896. Fred H. McEwen (R.), Emerson, Neb.; Sioux City Medical College, Sioux City, Ia., 1895. Herman Kunz (R.), Wymore, Neb.; University Medical College, Kansas City, 1896. Herbert H. Smith (R.), Brownville, Neb.; Bellevue Hospital Medical College, New York, 1896.

At the session held June 4th the following were granted certificates: H. A. Abbott (R.), Waterloo, Neb.; Chas. B. Spates (R.), Dunbar, Neb.; both from the Omaha Medical College, 1896. Wm. A. Schreck (R.), Bertrand, Neb.; medical department of the University of Louisiana, 1896. Aug. De Barker (R.), Omaha, and Clark F. Beebe (R.), Shelton, Neb.; both from the Creighton Medical College, Omaha, 1896. The application of W. F. Stouder was held till July. He graduated from the Physio-Medical College, of Indianapolis, in 1889.

GASTRONOMICAL ARITHMETIC.—Teacher: "Suppose, Johnnie, your mother cut a pound of meat into eight parts, what will each part be?"

Johnnie Chaffle: "One-eighth of a pound."

"Correct. Now, suppose she cuts each eighth in two, what will each part be then?"

"One-sixteenth of a pound."

"Just so. Now, suppose she cuts each sixteenth in six pieces, what will each piece be?"

"Hash!"—*Texas Sifter.*

Digitized by Google

Miscellaneous.

The Remedial Application of Bone Marrow.—Dr. William E. Quine, in his address as chairman of the section on Practice of Medicine, delivered before the American Medical Association at Atlanta, says: "For the original mention of bone marrow as a possible remedy we are indebted to Brown-Sequard and d'Arsenval, who, in 1891, suggested its use in the treatment of leukemia and other diseases believed to be characterized by defective hemogenesis. A year and a half later Fillean reported its successful employment, in the form of an extract, in the treatment of the anæmia of debility and of tuberculosis; and Macalister recorded a favorable result of its use in one case of lymphadenoma. (*British Med. Jour.*, June, 1893.)

"It was left for T. R. Fraser, of Edinburgh, however, to press the new remedy forcibly upon the attention of the medical world, and this he did in a report of its curative effect in a case of progressive pernicious anæmia. (*British Med. Jour.*, April 7, 1894.) The clinical phenomena described were those of extreme anæmia, and the diagnosis was based on repeated blood examinations. The treatment included the use of arsenic, iron, and salol, part of the time, but no improvement was noted till marrow was given, and the improvement advanced steadily under the use of the marrow after the other agents were withdrawn. The animal product, whether of the yellow or the red variety is not stated, was given to the extent of three ounces daily. The report ends with the declaration that 'The patient is now in a practically normal condition.'

"Dr. I. N. Danforth, of Chicago, well known as a physician of extensive experience, and as one of the most accomplished microscopists in his city, reported a case of pernicious anæmia which, under treatment with arsenic, glycerite of red marrow, and various adjuvants, improved so rapidly as to enable him to say at the end of three or four months that the patient 'now shows every indication of gradual restoration to health.' (*Chicago Clinical Review*, 1894, V.) Unfortunately the evidences of sustained improvement in this case were short lived. Not long after the publication of the report progressive deterioration of health ensued, accompanied by the presence of malarial organisms in the blood, which were now discovered for the first time, and the deterioration advanced to a fatal termination. In view of this unhappy conclusion of an inspiring beginning, it would be interesting to know whether the words of assurance used by Fraser two years ago in relation to the status of the case reported by him are equally applicable at the present time. In a personal communication dated April 4, 1895, Professor Danforth informs the writer of his later observations. He considers marrow applicable to all cases of anæmia and has used it with temporary advantage in pulmonary phthisis and in Bright's disease; and with apparently marked and permanent benefit in the anæmia of rapid growth, overwork, and underfeeding. In one case of Hodgkin's disease, in which the remedy was used, the patient got well; and in two cases of splenic leukemia there ensued an increase in the number of red corpuscles and some abatement of the hemorrhagic tendency, without any impression appearing to be made on other phases, or on the rapidity of progress of the malady. Professor Danforth prefers the red marrow and prescribes it in the form of an aromatic glycerite, of which one dram is given after meals. He directs attention to the possible danger of tubercular and other infections from the administration of uncooked marrow, and recommends the exclusive use of calves' marrow with a view to minimizing this danger.

"J. D. Mann reports (London *Lancet*, 1894, I) four cases of anæmia, two of them, apparently, cases of chloranæmia in girls, and the other two cases of simple anæmia from hemorrhage, all of which were greatly benefited by the remedy; and Charles Forbes (*British Med. Jour.*, 1894, II) and Henry Hun (*New York Med. Jour.*, 1894, LXI) each records a single observation of like kind.

"That the utility of the agent is not limited to simple and easily curable cases of anæmia is strongly vouched for by W. G. Bigger (London *Lancet*, 1894, II), who claims to have cured by its influence a case of leucocythemia of six years' standing. Iron and arsenic had been used with benefit on former occasions, but now a time had arrived when these remedies were powerless to prevent active and threatening progress of the disorder. At this time bone marrow was used, and in a remarkably short time it made the patient, a boy, perfectly well. The spleen, previously much enlarged, returned to its normal size. It is to be regretted that the gratifying experience of Dr. Bigger cannot, apparently, be duplicated by other physicians. That splenic leukemia is not strikingly influenced by bone marrow, as an ordinary event of its use, is clearly shown by the failures of Danforth, already mentioned, and of other observers hereinafter quoted.

One of the most satisfying contributions to our knowledge of the exact powers of the remedy, in various kinds of anæmia, is furnished by J. S. Billings, Jr. (*Johns Hopkins Hospital Bulletin*, 1894, V). This gentleman cites additional proof of its efficacy in chlorosis and chloranæmia; and shows that in two cases of pernicious anæmia, described with classical minuteness, it proved utterly useless; whereas, arsenic, in these cases, given in increasing doses, proved highly serviceable.

"A McL. Hamilton also records an interesting series of observations. (*New York Med. Jour.*, 1895, LXI.) He tested both yellow and red marrow, but obtained better results from the red. In every case cited the red corpuscles were counted by the Thoma-Zeiss apparatus, and their hemoglobin value was estimated by the instruments of Fleischl, Gowers, and Henocque. The whites

Digitized by Google

were not counted. Professor Hamilton shows that the multiplication of the reds after profuse hemorrhage is approximately twice as rapid as the maximum rate hitherto recorded (20,000-30,000 daily per cu. mm. of blood), and that the total number of reds can be made to exceed the showing of normal blood (5,000,000 per cu. mm.) by fully 20 per cent (6,000,000 per cu. mm.). He reports a case of pernicious anæmia in which iron, arsenic, and cod-liver oil had been used without success, and bone marrow had subsequently caused a rapid increase in the number of reds, from 1,000,000 to 6,000,000 per cu. mm. of blood, together with an equally striking improvement in all the symptoms of the disease. The improvement was found to be maintained at the end of two months, but the subsequent history of the case is not recorded. The report includes the results of eighteen separate studies, most of them relating to cases of ordinary anæmia without special features, and demonstrating the value of the remedy.

"My own observations concerning the effects of marrow in cases of chlorosis and simple anæmia agree in every detail with those already recorded. In one case of splenic leukemia (*Chicago Clinical Review*, January, 1895) the remedy used alone had the effect of increasing the number of red corpuscles and lessening the hemorrhagic tendency without appearing to improve the condition of the patient in other respects or retarding the progress of his sickness to a fatal termination. In this case, also, malarial organisms, so pronounced by two thoroughly trained microscopists, were found in the patient's blood in the last weeks of his life. They had been previously diligently searched for on several occasions without success.

"Bone marrow, then, and especially red marrow, is certainly a readily assimilable organic compound of iron, and is a valuable addition to the resources of the physician in cases of ordinary chlorosis and anæmia, and in some cases of blood impoverishment of a more intractable kind. Whether it is anything more than an assimilable preparation of iron is not conclusively proved. The claims made for it in relation to the cure of pernicious anæmia, leukemia, and kindred disorders seem to be premature; for sufficient time had not elapsed in any case to warrant such a conclusion. Moreover, in some of these cases, as pointed out by Billings (l. c.), the correctness of the diagnosis is not above suspicion; and, in others, arsenic and iron were given in conjunction, or in alternation with the marrow. We have no knowledge that enables us to understand how it is possible for this substance to effect a cure of pernicious anæmia or of leukemia. It cannot act like an ordinary animal extract which supplies a deficiency. Its operation must be unlike that of thyroidal extract in myxedema and adrenal extract in Addison's disease. In these disorders there is atrophy or some degree of destruction of the thyroid and adrenals, respectively, and, consequently, insufficient secretion from them to supply the needs of the body; and the administration of an artificial extract of the thyroid or adrenal supplies the demand directly. Whereas, in pernicious anæmia and leukemia the bone marrow seems to be hypertrophied and overactive, but notwithstanding its activity it is unable to keep pace with the globular destruction that is going on at the same time. Finally, there is no proof that marrow is a secretion. Its function seems to be that of cell production and development. Nor is there any proof that this function is influenced in any way by any constituent or secretion of the marrow itself (Billings). Many accurate observations are needed to make a basis for conclusions that will endure."

Percussion of the Heart with the Body Bent Forward.—From a clinical study, Gumprecht (*Deutsches Archiv fur klinische Medicin*) has found that the absolute cardiac dullness is increased in extent, intensity, and resistance by inclining the body forward during the act of percussion. While the dullness often disappears in the dorsal decubitus, as a result of pulmonary emphysema or gastro-intestinal tympanites, it is demonstrable when the body is inclined forward. With the aid of this procedure otherwise unrecognizable hypertrophies of the heart are rendered diagnosticable, and especially the left-sided hypertrophies of age masked by pulmonary emphysema—such as those associated with arteriosclerosis or contracted kidney—and less commonly right-sided hypertrophies.

The *Medico-Surgical Bulletin* and the *Medical Record* have each vented their pent-up antagonism against the American Medical Association, and now, like the small boy who has vomited his too well-filled stomach, they feel better. We are sorry to see these mighty warriors get stirred up, for it is too well known that their incompatibility with the American Medical Association cannot be overcome, so what is the use of opening up old sores. The American Medical Association is not infallible; in fact, we think that it has been too freely used by the astute medical politician, who gets the plum, and then makes the solemn protestation that he was strictly regular in getting it. Now, the association is sailing better, the winds are more propitious, and they have a man at the helm who justly rebuked "the money changers" in his first official utterances, and knowing the methods of the man, we can say that so long as he is president the politicians will have to keep under cover. The great octopus (the code question) will die a natural death, and the Golden Rule will yet bring harmony into the ranks, so that to be a member of the American Medical Association will bear with it more honor than it does today. It will require a few more men like Senn to do it, however, but it will be done.—*Medical Fortnightly.*

Digitized by Google

Tuberculosis of the Kidney.—There is increasing evidence that tuberculosis of the kidney, both primary and secondary, is commoner than the frequency of its recognition heretofore would lead one to believe. The importance of early detection, particularly if the lesion is primary or localized, must be obvious, as a number of recent observations have demonstrated the possibility of perfect recovery as a result of radical surgical intervention. The diagnosis depends essentially upon the detection of tubercle bacilli in the urine, obtained, if possible, directly from the ureter of the diseased organ. The early symptoms may fail entirely to attract attention. As the case progresses these are likely to assume the characters of those due to inflammatory lesions involving the part affected. The most conspicuous manifestations ordinarily are pain in the loins, often paroxysmal in character, and much like that of renal colic, together with the passage with the urine of blood and the debris of disintegrated tissue. Ultimately, constitutional symptoms appear, perhaps with evidences of extension, and often late in the progress of the case a swelling in the loin may be detected on palpation. When the affection, especially if primary or localized, can be recognized the remedy lies in resort to surgical measures, and in accordance with the conditions present these will consist principally in nephrectomy or nephrotomy. In a recent communication emanating from the Pepper Laboratory of Clinical Medicine, Hamill* considers this subject in its various clinical aspects and reports fifty-five cases that he has collected from the literature. Operation was performed in seventeen of this number, with the following results:

	Cases.	Improvement.	Recovery.	Death.
Nephrotomy....	4	1	2	1
Nephrectomy.....	9	1	5	3
Nephrotomy followed by nephrectomy..	4	1	2	1

These results must be viewed as in the highest degree assuring, and should stimulate the clinician to an early diagnosis.

An additional case illustrating the success attending early recognition and radical treatment of tuberculosis of the kidney has recently been reported by Casper (*Berliner klinische Wochenschrift*, 1896, No. 17, p. 369). The patient was a woman, forty-two years old, without hereditary predisposition, who for six months had complained of symptoms of vesical catarrh, to which became added pains in the right loin, together with a sense of abdominal tension. Varied local treatment proved unsuccessful. The urine was slightly turbid and of acid reaction, with a specific gravity of 1018. It contained numerous pus-corpuscles and siliated epithelium, but neither blood corpuscles nor tube casts. A small quantity of albumin also was present. In the centrifugated sediment tubercle bacilli were found. Upon cystoscopic examination the interior of the bladder appeared normal except in the situation of the right ureter, whose opening could not be seen. In its usual site was a diffusely reddened elevated area, in which blood vessels could not be recognized. The urine from the left ureter appeared clear and normal, while none could be seen to issue from the place where the right ought to have been, although from time to time a few drops collected in this situation. The left ureter was readily catheterized with the aid of the ureter ocystoscope, and the urine obtained proved to be normal. After a number of unsuccessful attempts to enter the right ureter the catheter disappeared beneath the mucous membrane of the bladder and was readily pushed further onward. The urine thus obtained resembled that found in the bladder, being turbid, purulent, and albuminous. Upon the first examination tubercle bacilli could not be found, but at a subsequent examination their presence was conclusively demonstrated. A diagnosis was therefore made of tuberculosis of the right kidney, with circumscribed involvement of the bladder. Accordingly nephrectomy was performed, with the recovery of the patient. The removed kidney presented tubercles upon its surface and two caseous nodules in its parenchyma. —*Medical News.*

* "Primary Tuberculosis of the Kidney, with Especial Reference to Its Manifestations in Infants and Children," p. 35. Philadelphia, 1896.

The Iowa Public Health Association held its fifth annual session at Davenport, May 19-20. Interesting papers on sanitary and hygienic subjects were read, and the following resolutions, favoring the establishment of a National Bureau of Health, unanimously adopted:

"Whereas, The discharge of sewerage into streams, ponds, lakes, or other bodies of water is a serious and rapidly growing menace to public health, by polluting the sources of water supply to a dangerous degree; and

"Whereas, The power of the state committee or municipality is wholly inadequate to check or in any way control the most pernicious method of sewerage disposal;

"Whereas, We believe the authority of the federal government is absolutely necessary to put a stop to the growing evil; Therefore be it

"*Resolved*, That this association most earnestly desires and would most heartily approve the creation of a national bureau of health, among whose functions should be the control of all rivers, streams, lakes, ponds, or other bodies of water, with reference to their sanitary condition.

"*Resolved*, That the State Board of Health of Iowa, and the State Board of Health of Illinois and that of Minnesota be requested to take, as promptly as possible, such action as shall lead to the drafting and formulating of a petition to Congress asking that a National Bureau of Health be created, or otherwise putting the necessary machinery in motion that this very important end may be obtained."

Digitized by Google

Symptomatic vs. Anatomical Cure After Gynecological Operations.—In the *New York Polyclinic* for May 15th there is an article on this subject by Dr. Henry C. Coe, who remarks that the tendency of modern gynecology is strongly surgical. It is no exaggeration, he says, to state that both in their teaching and in their practice not a few specialists are inclined to view most pelvic troubles purely from an operative standpoint; indeed, those who lean rather to the side of conservatism are often influenced by the prevailing *ardor operandi*, as well as by the frequent inclination of patients to seek a short surgical cut to relief from their ailments, rather than the more circuitous route of long and tedious local treatment.

Since gynecological operations for the cure of minor troubles are so much more frequent than they were a few years ago, and are performed by the general practitioner, as well as by the specialist, it seems pertinent, he thinks, to inquire whether the ultimate results are, on the whole, more satisfactory than they were in the days when the non-surgical treatment of the same affections was generally in vogue.

Dr. Coe excludes from consideration the major operative procedures undertaken for the purpose of saving life or removing diseased organs or neoplasms, by either abdominal or vaginal section. He makes particular reference to the operations for the cure of displacements, the repair of traumatic lesions, or the relief of congenital anomalies, as well as the so-called conservative surgery of the annexa. The question, he says, naturally suggests itself to one who looks beyond the operation *per se*, How far does it fulfill the indications in a given case, and to what extent does the symptomatic correspond with the anatomical cure?

The fact cannot be too frequently or strongly emphasized, says the author, that every gynecological case observed for the first time should be regarded as offering a separate problem for solution. Given a certain set of symptoms for the relief of which (rather than for the cure of any recognized lesion) the patient seeks the aid of the specialist, it is his difficult task to analyze these, to refer them to their true cause or causes, and finally to suggest the remedy. Manifestly, he says, his decision will depend largely upon the relative importance which he assigns to the associated pathological conditions—since they are usually more than one. In this regard he is apt to be biased by his early training, his peculiar views on pelvic pathology, by his former experience in similar cases, and above all by his favorite hobby, which few fail to ride until they meet with some bad falls. Hence the wide diversity of views among men equally skilled and equally honest, and hence the resulting confusion in the mind of the patient. In New York particularly, says Dr. Coe, it is no uncommon experience for a woman with the familiar combination of laceration of the cervix and of the pelvic floor, with retroversion and prolapse of the ovaries, to consult a number of specialists and to receive as many distinct opinions as to the proper treatment to be pursued in her case. One will advise tamponade, another the insertion of a pessary, a third will promise a positive cure by the ordinary plastic operations, a fourth would supplement these with Alexander's operation, a fifth would add ventrofixation, while a sixth attributes all the symptoms to the ovary and recommends its entire or partial removal by vaginal or abdominal section, as his preference may be. Each may be perfectly honest in his opinion, and it would be worth little if he were not prepared to stoutly maintain it. Yet, Dr. Coe continues, it is manifest even to the laity that all cannot be right—that is, if there is any connection at all between obvious pathological conditions and symptoms—while the unpleasant fact often comes out that in a case like the one mentioned, even after the cervix and pelvic floor have been restored to an apparently perfect condition, the uterus kept in its normal position, and the prolapsed ovary elevated, the patient may return after the lapse of several months complaining that she has not experienced the promised relief. This is a discouraging experience for the beginner, who has derived his ideas of the value of gynecological surgery from the writings of the enthusiastic originators of the operations. Men who do much work in outdoor clinics are apt to become somewhat pessimistic with regard to the value of such operations when they see patients return month after month for treatment who were discharged from the hospital as cured—a term which is now generally accepted in a surgical rather than in a symptomatic sense.

Granting, says Dr. Coe, that we have passed the elementary stage in surgery, and assume that primary union is to be expected in every aseptic case, we are now more concerned about the ultimate than the immediate results of minor gynecological operations. He gives a brief review of some of the reasons why the former do not always meet the expectations of the patient and surgeon, which, he thinks, may not be without interest. One of the most obvious is the undue importance assigned to minor pathological conditions of the pelvic organs occurring in patients whose symptoms are really due to organic or functional troubles elsewhere. Reflex neuroses are notoriously the excuse of the hasty operator, and the temptation to refer distant neuralgia, backache, hysteria, and all the puzzling phenomena with which we are so familiar in the neurotic women of the present day to a laceration of the cervix, a prolapsed ovary, or a slight anteflexion is so strong that it requires no little courage for a gynecologist to give an opinion to the contrary.

It is not only, however, for the reasons stated, says Dr. Coe, that many minor gynecological operations are disappointing in their ultimate results. The indications may have been clearly recognized and fully met, the operation anatomi-

Digitized by Google

cally perfect, yet the patient fails to experience the promised relief. The causes are not hard to find in most instances, especially in hospital practice, where patients are often discharged a few days after the removal of the stitches, with no definite instructions as to rest and the avoidance of matrimonial relations, and with no cautions as to the necessity of after treatment.

In private practice the situation is somewhat different, but even here, he thinks, we do not sufciently emphasize the fact that weeks and months may elapse before the patient fully experiences the beneficial effects of the operations, during which time it may be necessary for her to wear a pessary, often an abdominal bandage, to continue her douches, and to remain under close observation. The patient may delude herself with the hope that the benefits of plastic operations will be experienced as soon as she leaves the sickroom, but the surgeon ought never to expect any such miraculous results. In brief, the operations may be only the initial rather than the final step in a course of local and general treatment. This, says Dr. Coe, is not an admission of the limited range of gynecological surgery so much as it is an intelligent statement of the complex conditions with which we are often obliged to deal. A clear understanding of this fact will render us, if not more conservative in our treatment, at least more careful in our prognosis.

The following conclusions, says the author, may be drawn from the foregoing remarks: Not only are the pelvic pains for which the patient consults the gynecologist complex, but their origin is often obscure. It is safe to infer that they are seldom referable to a single obvious pathological condition. Hence the operative treatment of this condition must be more or less empirical. Prolonged observation of the patient may be necessary before the true anatomical cause of the symptoms is determined. It may in many cases be wise to insist upon a course of local and general treatment, the correction of displacements, etc., before suggesting the advisability of an operation. The exact object aimed at in the operation should be clearly explained to the patient, and especially the true relations between the anatomical and the symptomatic cure. Above all, stress should be laid upon the fact that immediate benefit is the exception rather than the rule.

Dr. Coe thinks that it may not be amiss to warn the post-graduate student, who, during his stay of a few weeks in a large city, witnesses a considerable number of operations, that there is a distinct danger of his absorbing too much of the surgical spirit which is in the air. Not only are gynecological operations performed earlier and more frequently in the case of hospital patients who cannot submit to a long course of preliminary treatment, but such operations are often more heroic than would be attempted in private practice for the relief of the same conditions. Moreover, he says, the patients themselves readily submit to them on the advice of prominent surgeons, whose professional standing is such that it is not affected by individual failures; but in his own smaller community the practitioner must be aware that the conditions are widely different. There an operation, however small, is invested with considerable importance. Everyone hears about it. The practitioner's own reputation is at stake, and he must consider the remote as well as the immediate consequences of the surgical procedure from which he has promised so much. He cannot discharge his patient as cured at the end of three or four weeks and assume no responsibility with regard to her subsequent condition. She remains with him—a daily evidence of his failure or an active herald of his success.

It is for this reason, continues Dr. Coe, that it behooves every thoughtful man not to accept unhesitatingly the dicta of any teacher, however eminent, but to ask himself how far he can apply them in his own practice. If he is wise he will carefully consider all the conditions in every case before he urges an operation, and will above all keep clearly in mind the essential difference between the repair of lesions and the relief of certain symptoms which may or may not be dependent upon them. The over-enthusiastic surgeon who always promises a cure will in the long run gain the confidence of his community less surely than the one who seems to err on the side of timidity and ultra-conservatism, especially if the former's opinions are suspected of being somewhat too strongly influenced by financial considerations.—*New York Medical Journal.*

The Medical Treatment of a Common Clinical Form of Functional Impotence.—Every practicing physician has had a case very similar to the following, come and ask his advice.

A young man more or less nervous, and presenting signs of anxiety and worry, out of all proportion to his condition, will consult one and say he is losing his "powers," that he is no longer any good; and we at once can see what an extremely important matter this is from his point of view. In short, his condition has rendered him morbid and at the same time he is keenly sensitive.

On making an examination we usually find no disease or malformation affecting his sexual organs, and can therefore place the case as one of functional or false impotence, and not the true or organic form.

Taking up the subjective examination, we may learn that the patient's sexual desires are strong, but that premature emissions occur, or perhaps erection is imperfect, or may be erection has not taken place on attempted intercourse. In other words, the patient has lost faith in himself. The above conditions may have followed after a course of self-abuse, or what is more likely, after a period of excessive indulgence in sexual inter-

Digitized by Google

course. In a city of the size of Philadelphia, frequently the starting point of his trouble has been the reading of some pamphlet, with possibly the fascinating title of "know thyself, young man," etc., which has been issued by one of the numerous quacks or charlatans that abound in every large city. Here, from a judicious blending of truth and lies, the reader comes perilously near becoming a moral and physical wreck, especially if he interviews the author of said pamphlet and has sufficient of this world's goods to make a few return visits.

Now, in each case, we have to deal with a condition in which the sexual apparatus is being constantly excited and irritated, and consequently the reflex center in the spinal cord is never at rest and an attempt is being made all the time to whip out that which is exhausted.

Therefore, in treating such cases, one should not begin by putting the patient on aphrodisiacs, as phosphorus or damiana, but adopt a line of treatment that will soothe and tranquilize the patient, and stay, for a time at least, his more or less morbid desire to accomplish sexual intercourse. For this purpose in the clinic we frequently prescribe the following mixture:

Tincture of hyoscyamus....20 minims
Potassium bromid.....20 grains
Camphor water sufficient to make one-half fluid ounce.
Mix.
To be taken in water four times a day.

After following this plan for two weeks, or longer if necessary, and its purpose having been attained, it is then, in the case of married men, permissible to begin tonic aphrodisiac treatment. A combination of great value in the clinic service is as follows:

Strychnia sulphate.....1-32 grain
Diluted phosphoric acid.....1 fluidram
Distilled water.....1 fluidram
Mix.
To be taken in water four times a day.

The above plan of medication in a large number of cases will give very satisfactory results.

The physician must, even in cases of false impotence, study the personal equation in each case, and do his best to gain the patient's confidence. In case of unmarried men it is well to use the opportunity to warn them against the moral and physical risks involved in unchastity; and to inform them that a life of continence is the true physiological life.—*John Lindsay, M. D., in Philadelphia Polyclinic.*

"Taking Poison."—The supreme court of Illinois handed down two decisions, March 28th, 1896, in which it holds that the term "taking poison," as used in a policy of life insurance, means the voluntary taking of poison, or an intelligent and conscious act. In the first case, Travelers' Insurance Co. v. Dunlap, the death of the insured was caused by his mistaking a bottle of carbolic acid for peppermint. In the second case, Metropolitan Accident Association v. Froiland, death resulted from chloral being taken by mistake for distilled water. Here the policy provided: "I agree that this insurance shall not be held to extend * * * to poison in any way taken, administered, absorbed, or inhaled." The words, "any way taken," the court holds, relate to the mode or manner in which the poison is taken, and not to the motive of the insured in taking it. In both cases the supreme court affirms judgments rendered for the respective plaintiffs against the insurance companies.

Liability for Negligence in Making Examination—"The law does not exact from physicians and surgeons the utmost degree of care or the highest attainable skill in the practice of their profession, although they, by virtue of their relation toward patients, impliedly engage that they possess ordinary knowledge and skill, and that they will in the course of their employment exercise such proper care and attention as may be reasonably expected from members of their profession." Such is the statement of law made by the supreme court of Nebraska in connection with its decision of April 7, 1896, in the case of Griswold v. Hutchinson. This was an action brought against two physicians. The plaintiff alleged that he had employed them to treat his wife for what they pronounced an ovarian tumor, and that when they performed an operation therefor they found her only ailment was a fibroid tumor of the uterus, which fact they concealed from him. The court says that it was clearly established by the record that they were mistaken respecting its being an ovarian tumor. Some of the evidence in the case suggested that as careful an examination was not made as should have been for the purpose of determining on an operation. Indeed, the court says, on this point, that the testimony of the medical witnesses tended directly to prove the wrong alleged, viz., negligence in the examination, and the consequent unfortunate result thereof. On the trial in the district court, judgment was entered in favor of the defendants on the verdict rendered, in accordance with the peremptory instruction of the judge. The supreme court held that this was error as to one of the defendants, and reversed the judgment as to him. But as to the other defendant, Dr. Hutchinson, the court holds that the judgment in his favor was correct. When first consulted, he advised the plaintiff to consult some physician who was a specialist in that line, and his attitude toward the case after surrendering the patient to the other defendant was that of a friend and counselor only, and in no sense that of a physician or surgeon. On this ground the court exonerates him.—*Journal American Medical Association.*

Digitized by Google

Woman and the Bicycle.—So much has been said and written about the advantages and disadvantages of bicycling, especially for women, that it would be well-nigh impossible to add anything new on the subject. There are now probably very few physicians who would not recommend bicycling as a safe and healthful form of exercise to a woman without grave organic disease. It should, in our estimation, be forbidden where grave disease of the pelvic organs and acute disease of the bladder exists, but in the minor pelvic ailments it might safely be tried; for the increased amount of oxygen introduced into the system, the swifter circulation, and the mental exhilaration would be powerful tonic factors and be especially serviceable in cases associated with hypochondriasis. It is hardly safe to allow persons with organic heart disease to ride, although Tiburties, in a recent number of the *Deutsche Medicinische Wochenschrift*, of April 2d, claims that in his own case bicycling regulates the heart's action, and he rides with impunity, although suffering from atheroma and a moderate amount of emphysema.

That bicycling produces a sense of well-being, both physical and mental, that it increases the appetite and promotes sleep, cannot be disputed by anyone who has ever ridden. A woman especially, however, should remember that all the benefits derived from bicycling will be nullified if it is carried to excess. The rides should be judiciously graduated, commencing with a few miles and very gradually increased in length, but never carried to the point of physical exhaustion.

Hills of any size should not be attempted until they can be ascended with comparative ease. Riding should be forbidden during the menstrual periods. The clothing should be light and comfortable, the underwear preferably of wool or silk. The corset should be discarded, as it prevents the full expansion of the lung and impedes the circulation, and as a good substitute can easily be found in the Ferris or equipoise waist.

There should be no constriction about the limbs, as that would impede the circulation and lead to the formation of varicose veins. The objections which have heretofore been raised against faulty saddles have been removed to a great extent by the Messinger and Christy saddles, which appear to meet all the indications.

The saddle should be so adjusted that the extremity is not completely extended as it reaches the lowest point of the pedal, for complete extension favors a tilting forward of the pelvis. The handle-bar should be arranged in such a way that the forearm is slightly flexed.

If the foregoing points are observed and conscientiously carried out by the rider, bicycling is one of the most wholesome and delightful forms of exercise a woman can take. It is especially to be recommended in neurasthenic patients, in those suffering from derangement of the digestive system, particularly when complicated with constipation, and in cases where the system is below par, the result of a sedentary mode of life.—*Woman's Edition, Buffalo Medical Journal.*

Another Method of Exterminating Cancer of the Breast.—Tansini, of Palermo, describes his method in the *Riforma Medica*, which he asserts will prevent future relapses. He makes a pear-shaped incision, the large end embracing the breast and the small end terminating in a couple of incisions meeting at the axilla. After the tumor is removed with the pectoralis major, he makes a similar incision in the back, and applies the flap thus produced to the open space in the breast. The flap cut in the back is raised, except at the small end, which reaches to the insertion of the latissimus dorsi. It is then applied to the open space in front, twisting it a little to bring it around in front over the wound. The edges are then sutured, and the edges of the wound in the back are pulled together and also sutured, as can readily be done, owing to the elasticity of the skin, a couple of liberating incisions being made if necessary.

Amendment of Colorado Pharmacy Law.—Sections 10 and 12 of the pharmacy law passed in Colorado in 1893 were amended in 1895; the former by raising the penalty from $25 to $250 for any person other than a registered pharmacist retailing or dispensing drugs; the latter by incorporating a provision that the pharmacist failing or neglecting to procure his annual registration, or any person making any false representations to procure for himself or for another registration, or any person violating any other provision of this act, shall for each and every offense be liable to a fine of $100.

Pregnancy After Ventral Fixation.—Milander (*Zeitschrift f. Geb. u. Gyn.*, January, 1896) has studied seventy-four cases of pregnancy after ventral fixation. Presentation was normal in forty-nine cases, cross-birth occurred in three cases, foot presentation in one case, and in one case the ear was presented. Artificial aid was required in eleven cases. The cross-births were doubtless due to an enlargement of the uterus transversely instead of longitudinally. The unusual number of cases requiring artificial aid was doubtless due to the ventral fixation.

Turpentine in Post-partum Hemorrhage.—This is a prompt and efficient remedy. A piece of lint saturated with turpentine should be carried directly into the uterus so as to bring it into contact with the inner surface. In one or two cases where the patient was almost pulseless it seemed to act as a stimulant, but on no occasion did it fail to instantly check hemorrhage and produce contraction.

Digitized by Google

PREVENTION OF HEMORRHAGE IN DISARTICULATION AT THE HIP-JOINT.—Amputation at the hip-joint has always been accompanied by a very high mortality, and two causes especially can be assigned to this great death-rate—namely, infection and shock. The deaths due to infection are now much less frequent than they were in the pre-antiseptic days, but shock still remains responsible for a very large proportion of deaths. A great part of this shock is caused by the large amount of blood which is so often lost at this operation, and many attempts have been made to diminish the hemorrhage. One of the most recent methods was brought forward by Dr. V. Chalot, professor of clinical surgery at the Faculty of Medicine of Toulouse, at the Huitieme Congress de Chirurgie, held at Lyons. He suggests that a slightly curved incision, four or five centimetres in length, should be made about two centimetres internal to the anterior superior iliac spine, and the anterior abdominal muscles then divided, so that the peritoneum can be gently raised from the iliac fossa. When this is done the common iliac artery can be felt on the inner border of the psoas muscles. An assistant places on the artery the tips of the middle and ring fingers of the left hand for the right side of the patient, and of the right hand for the left side, at the same time grasping the iliac crest with the forefinger and the thumb, while the little finger rests on the abdominal wall. The compression is made against the ala of the sacrum, and its efficacy is judged by the cessation of the femoral pulsation. The amputation is then proceeded with in the ordinary way. Dr. Chalot quoted a case in which he had employed this method with success, and with only a small amount of hemorrhage.—*Lancet.*

Necrology.

DR. JOHN F. MACKENZIE, of Leroy, Ill., died April 13th.

DR. W. D. ROBINSON of Macomb, Illinois, died May 24th, of erysipelas.

MICHAEL PETEL, M. D., of Buffalo, New York, died in that city May 20th.

DR. D. W. CARLEY, a graduate of Rush, 1856, died May 26th, of Bright's disease.

DR. J. T. PEARMAN, of Champaign, Illinois, died there May 25th, aged sixty-six.

DR. J. H. LEDLIE, one of the oldest physicians of Pike county, Illinois, died May 25th.

THOS. T. HINES, M. D., a graduate of Keokuk, 1892, died May 13th at Middle Creek, Ohio.

ORIN D. TODD, M. D., of Eminence, Kentucky, died May 4th in Louisville, aged fifty-three.

DR. A. P. ROGERS, of Canon City, Colorado, died at that place April 26th, of tuberculosis.

DR. JOS. P. PARKER, the founder of the Annals of Ophthalmology and Otology, of St. Louis, died recently.

CARLTON P. FROST, M. D., LL. D., dean of Dartmouth medical college, died May 24th of heart disease, aged sixty-three.

GEORGE B. WHEELER, M. D., died April 7th at the Willard State Hospital, New York, of appendicitis. He was a member of the hospital staff.

DR. CHAS. O. CURTMAN, for thirty years professor of chemistry in the Missouri Medical College, St. Louis, died April 22d, at the age of sixty-six years.

ST. GEORGE BRIDGES, M. D., died at Richmond, Virginia, April 20th, of appendicitis, a disease of which he had made quite a study, and in which he was considered an authority.

DR. IRVING W. LYON died of pneumonia at his home in Hartford, Connecticut, March 4th, aged fifty-six. He was the president of the Hartford Medical Society at the time of his death.

PROF. GERMAIN SEE, the eminent French physician, died in Paris, May 13th, aged seventy-nine years. He has been a great contributor to the medical literature of the world, and was one of the world's most noted theapeutists.

Therapeutic Notes.

GOOD and speedy results may be obtained in acute coryza by spraying the nasal mucous membrane with a mixture of one part of ichthyol in one hundred parts of ether and alcohol. One application will often prove sufficient.

BROMOFORM IN WHOOPING-COUGH. — Marfan (*Revue Mensuelle des Maladies de l'Enfance*, April, 1896, quoted by the *American Journal of Medical Sciences* for June) contributes favorable testimony in favor of the use of bromoform for pertussis, gained by observation of its use in forty cases. The formula he employs is as follows: Bromoform, 48 drops; oil of sweet almonds, 20 grammes; gum adragante, 2 grammes; gum arabic, 4 grammes; cherry-laurel water, 4 grammes; add water to make 120 c. c. Mix first the bromoform and oil and shake vigorously; then add the other ingredients. A teacupful contains two drops of bromoform. For a child he prescribes as a daily dose four drops for each year of its age; from five to ten years the beginning dose is twenty drops daily. These doses should be gradually increased two to four drops daily until they are doubled. Under six months the initial dose should be two to three drops; from six months to one year, from three to four drops. In all cases the daily dose should be given in three portions.

Digitized by Google

Chronic Pyelitis.—When pain is present A. Robin prescribes:

℞ Venice turpentine . . . . . .
Powdered camphor . . . . . aa ʒiss
Extract of opium . . . . . gr. v
Extract of aconite-root . . . . . gr. iij

Mix and make into twenty pills. One pill to be taken every eight hours, and at the same time a small glassful of infusion of uva ursi, slightly sweetened.—*Le Progres Medical.*

Stomatitis and Difficult Teething of Children.—1. Paint the gums with the following mixture:

℞ Cocainæ mur. . . . . gr. iss
Sodii chlor. . . . . gr. xv
Glycerini } aa . . . . . ʒ iiss
Aque dest. }

2. Spray a boracic solution on the inflamed parts.

3. To prevent spasms, give internally:

℞ Potassii brom. . . . . gr. xv
Syr. alth. . . . . ʒ v
Salep gummos . . . . . ʒ j-ʒ ij

M. Sig.—Teaspoonful every hour.

Chlorosis.—The late Sir Andrew Clark recommends the following treatment for chlorosis: With careful attention to the diet and a tepid sponge bath, followed by brisk towelling, both night and morning, he prescribes the following mixture, to be taken twice a day:

℞ Ferri sulphat. . . . . gr. xxiv
Magnes. sulphat. . . . . ʒ vj
Acid. sulph. aromat. . . . . ʒ j
Tinct. zingib. . . . . ʒ ij
Infus. gentian comp. vel quassiæ . . ʒ viij

M. Sig.—One-sixth part twice daily, about eleven and six o'clock.

"Occasionally this acid mixture produces sickness, dries the skin, and is otherwise ill-borne." In such cases he prescribes the following alkaline mixture:

℞ Ferri sulphat. . . . . gr. xxiv
Sodii bicarb. . . . . ʒ ij
Sodii sulphat. . . . . ʒ vj
Tinct. zingib. . . . . ʒ vj
Spt. chloroformi . . . . . ʒ j
Infus. quassiæ . . . . . ʒ viij

M. Sig.—One-sixth part twice daily, at eleven and six.

Sometimes neither mixture agrees, and then he prescribes sulphate of iron in pill with meals and a saline aperient on first waking in the morning. By this plan Clark claims that nine out of ten cases of chlorosis recover in from one to three months, and by careful attention to the bowels, taking twice a week a pill composed of aloes, myrrh, and iron, the recovery will probably be permanent.—*Medical Record.*

Hemorrhoids.—Dr. J. N. Baughman, of Flat Lick, Kentucky, gives, in the *American Practitioner and News*, the following formula:

℞ Fl. ext. belladonna . . . . . ʒj
Fl. ext. horse-chestnut . . . . . ʒij
Tannic acid . . . . . gr. x
Vaselin . . . . . ℥ij

M. et fiat ungt.

Sig.: Apply to inflamed parts two or three times in twenty-four hours.

Books and Pamphlets Received.

Exercise and Food for Pulmonary Invalids, by Charles Denison, A. M., M. D., Denver, Colorado. Denver, Chain & Hardy, publishers.

This little brochure is, as its name indicates, to teach how to fight that most dreaded disease, consumption. The author is well qualified to discuss these questions, and in this little book,—which is for the patient and not for the physician,—he gives excellent advice to the invalid. The instructions given for exercise are easily followed, and cannot but result in good to those who use them. The illustrations are good and help to elucidate the lessons taught.

A Consideration of Some of the Newer Problems in Abdominal and Pelvic Surgery in Women, by Charles P. Noble, M. D., Philadelphia. Reprint from the *American Journal of Obstetrics.*

Movable Kidney, by Charles P. Noble, M. D. Reprint from *Gaillard's Medical Journal.*

The Surgical Treatment of Hemorrhoids, by Henry O. Marcy, M. D., Boston. Reprint from the *American Journal of Obstetrics.*

Medical Legislation in Nebraska, by Dr. O. Grothan; president's address, delivered before the Loup Valley District Medical Society, March 10th, 1896.

Rational Drug Therapy in Typhoid Fever, by Dr. O. Grothan. Reprint from *Omaha Clinic.*

The Economics of Prostitution, by Woods Hutchinson, M. D. Reprint from the *Canada Lancet.*

Degenerative Heredity, by Charles Denison, A. M., M. D. Reprint from the *New York Medical Journal.*

What is the Matter with the American Stomach? by J. H. Kellog, M. D. Reprint of paper read before the Mississippi Valley Medical Association.

Minor Plastic Operations About the Eye, by Dr. H. Gifford, Omaha. Reprint from the *Archives of Ophthalmology*, vol. XXIII, No. 1.

An Orbicularis Pupilary Reaction, etc. Same.

The Shield Dressing for Cataract Extraction. Same.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL I. No. 3. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. JULY 15, 1896.

Original Articles.

INJECTIONS OF CARBOLIC ACID IN THE TREATMENT OF HYDROCELE, GANGLIA OF THE WRIST, HOUSEMAID'S KNEE, AND TUBERCULOUS CERVICAL GLANDS.*

BY VICTOR H. COFFMAN, M. D.,

OMAHA, NEB.

My apology for presenting this paper is offered in behalf of the class of physicians of "Ye olden time," the general practitioner, who lived and flourished when it was possible for him to be something more than a procuror for the specialist, when he could prescribe for scabies his ointment of lime and sulphur and anoint his patient with balsam of Peru without the specialist of skin diseases being called in—or treat the wayward youth with injections of nitrate of silver and a bottle of injection, Brou, without consulting the specialists on venereal diseases, submitting to curettement of the urethra as the proper fad for the destruction of the gonecocci, and when he could prescribe for the initial stages of a periapendicular morbidity with constipation, by giving salines and calomel and antiseptic enemas without the patient's friends insisting on consulting a McBirney or Summers, or Jonas Lee, Hamilton or Davis, and Lord, or the latest graduate who happened to attend one month at a special clinic and returned to style himself a specialist. Also, could he, by having the prestige of being the family physician, be permitted to prescribe for the feminine members—pains, aches of the abdominal region—without the interference of the gynecologist, curetting the uterus and the removal of the ovaries? And even he is not permitted to recommend an effusion of couch grass to the male patient who has too frequent micturition till the specialist on urinary diseases must be consulted, and at once prostatitis is established, and, in hand with the surgeon, your patient disappears for a time to reappear with his beard fallen out, his voice a beautiful soprano, and behold the transformation—the "coming woman."

In presenting this paper to this honorable society, without any priority or originality claimed, I simply state that for ten years I have successfully treated these morbid conditions referred to in the title of this paper, and surprising to me that this method has not been universally adopted, instead of the use of the scalpel, or irritating injections of iodine. The latter not always resulting in a permanent cure, though always resulting in producing pain, disabling our patient for days or weeks. The knife, with more in its favor, still puts your patient to bed, and disfigures ofttimes with a cicatrix, especially in the ganglia cases, also requiring anesthesia, which is never entirely free from the danger of possibilities of accident. With reference to hydrocele, the importance of which may be illustrated by referring to the case of the historian, Edward Gibbon, who had the largest hydrocele on record, as large as a bucket, enduring repeated operations and attempts for relief, finally succumbs to septic fever at the age of fifty-seven. The simplicity of the carbolic acid treatment is equaled only by the certainty of cure without complication. It is not my purpose to enter into the discussion of the morbid conditions of the pathological anatomy of hydrocele, but will include sero-cysts generally. If you will but refer to the history of those who have used carbolic acid at all, they first evacuate the fluid. Kussner, of Moscow, preferred the injection of four per cent solution, and Dr. Eve, of one of the London hospitals, refers to this method as potent and permanent in result. If you resort to the method of free incision, resection, and drainage for the cure of sero-cystic disease, with all the adherence to aseptic provisions and the paraphernalia of the operating room, anesthesia, trained nurse, assistants, with hospital accommodations, requiring two weeks in bed even with the skilled operator—waste of talent, skill, and time can be supplanted by this simple procedure, which is economy in time and expense, and above all is without danger or pain. The surgeon too lightly exposes his patients to risks of operation (for every operation has its risks), and he who operates most and best knows this well. Deterring the ambitious blood-thirsty aspirant of gory honor at the expense of his victim's credulity.

What relationship can exist in these morbid conditions resulting in producing hydrocele, ganglia, housemaid's knee, and sero-cystic tumors in general when one and the same procedure restores the tissues involved all alike to the normal condition? How the acid acts on the endothelial lining of the vaginal sac to change from secreting to an absorbing function is unanswered. Suffice it that by the use of an hypodermic syringe

* Read before the Nebraska State Medical Society, Lincoln, May 20, 1896.

Digitized by Google

holding one drachm of 95 per cent solution of pure carbolic acid, inserted into the superior part of the tumor, guarding the superficial veins of scrotum, the acid is injected forcibly into the sac without previous evacuation of the fluid. Should the tumors be excessively large, two injections or two drachms will be necessary for the first treatment, withdrawing syringe slowly after two minutes, preventing escape of fluid, applying a little vaseline to the surface, or mop the parts with alcohol if any of the acid has escaped, preventing the cauterizing of the integument, put on a dressing of gauze to protect from oozing, and your patient permitted to go about his occupation, no risk incurred or pain endured. Within twenty-four hours a slight reaction follows, which lasts two to five days, and the size of the tumor diminishes gradually. Should it not recede, then repeat the injection of a like amount of acid, and within one month all traces of enlargement disappears, and not in one instance has it been my experience to have it return or any complication follow. The most numerous class of patients I have treated for this condition or disease are farmers. They come to my office in Omaha. I have injected them with the acid. They have gone to their homes immediately, done their work as usual without complaining or any inconvenience, and within a few weeks are surprised that the swelling has entirely disappeared.

The first case of hydrocele I operated on by this method of injecting carbolic acid was a man living at Florence, running a saw-mill. This was twelve years ago, never any return of the trouble since. The following year two farmers, close by, were operated on by acid, one having required the second injection three weeks subsequent to the first treatment, resulting in permanent cure. Neither were restricted in their labor or confined an hour in bed; in fact painless was the operation, and no return of swelling or reappearance of hydrocele since. Thus, in brief, is the method adopted; nothing to detail in the history of the cases operated on; simply letting them alone and, as by magic, they are cured.

House-maid's knee, as you know, is but an inflammation of the "bursa of the patella-tendon," with circumscribed effusion, painful, and disabling the patient. For several years I have resorted to the injections of one drachm of pure liquid carbolic acid into these tumors. Within five days the second injection of half a drachm of the acid has been necessary in one-third of my cases. The inflammatory action continues for a few days and the swelling and soreness subsides within a fortnight, and in a month's time has disappeared. Not in one instance has this treatment caused any inconvenience, or any complications following, the patients continuing their usual avocations. The morbid condition of these cases extend sometimes to the joint and the muscles of the leg, the tumors attaining large size and very painful. When taken into consideration the class of people who are subject to it, who cannot afford the time and expense of a surgical operation, this method of treatment is peculiarly adapted. At present I have two cases of house-maid's knee under treatment which I injected each with one-half drachm of 95 per cent solution of carbolic acid. This was done ten days ago, and I find one of the tumors almost entirely gone, and probably, from the slight reaction in the one case, and the slow absorption, will require a second injection.

Tuberculous Cervical Glands.—Within the last two years I have treated four or five cases of enlarged glands in the cervical region with two to five drops of liquid carbolic acid injected with a fine needle into the center of each gland, with the result of creating slight inflammation, resulting in the softening and liquefying of the gland, and finally absorption taking place, disappearing without a trace of thickening. Whether these glands are tuberculous or not, in no instance has other glands developed in the same patient as is so frequently the case after excision. My cases are too few and too recent to command the respect of investigators, but the appeals of the fair patients to be free from these defects so abhorrent to their vanity and physical respect, if not a tainted constitution, scrofulitic in nature, also the warnings of cases operated on by excision and the scars remaining and numerous other glands developing till some of them go on to suppuration and by nature's process are eliminated, are in evidence of some better mode of treatment.

Ganglia.—Ten years ago I was consulted by Miss C., of Omaha, concerning two exceedingly large bursa, or cystic tumors, on each wrist. My method of treatment was injecting into each tumor five drops of pure liquid carbolic acid. Into the largest tumor I injected ten drops, no preparatory treatment, no precautions exercised, but within twenty-four hours after some inflammation developed, when I applied simple bandage dressing with a lotion of dilute lead water for two days. Then the swelling began to subside, and within a month there was not a trace of either tumor left, and never returned. A young man was the next case operated on in the same year, who had one large and two smaller ones in the course of the same tendon. I injected the larger with five drops of 95 per cent solution carbolic acid, a very little inflammation followed, and within three weeks the tumefaction had subsided entirely and has never since returned. These two first cases I have been able to watch for years and know positively that there is no return of the trouble. This is the only method adopted since then for the treatment of ganglia, for all class of cases, though the compound or diffused ganglia consists of chronic effusion in the common sheath of a group of tendons almost exclusive to the common flexors of the fingers. One variety of this contains the so-called melon-seed bodies. They are

Digitized by Google

smooth, oval, and tough as cartilage, pearly white color, composed of fibroid tissue, which have to be removed first by incision. Then, when the tumefaction reforms, I inject the acid, the quantity in proportion to the size of the swelling. The result has been perfect cures and no complaints or regrets. Contrast this method with the non-surgical procedure of rupturing the sac and wearing of hard compresses for weeks, or the application of blisters, renewed for weeks, with dismal failure at last, or the hazardous operation of incision, leaving behind a disabled tendon and an unsightly cicatrix.

NOTES OF A CASE OF SUSPENDED VOLITION AND LOCOMOTION.*

BY G. A. MEREDITH, M. D.,

CRAWFORD, NEB.

On the 17th day of May, 1893, a team was hurriedly driven to my office by two men, who inquired of me if I could do anything for a man they had in their wagon. They gave me a history of the case as follows: At 7 o'clock A. M. the previous morning (May 16th), after eating a hearty breakfast, instead of getting his hands to work (as he was running a saw-mill), he went to bed and apparently to sleep. They let him sleep till after dinner; then, concluding there was something wrong, they began trying to arouse him. They put water to his lips and found that he could swallow; they then resorted to every device they could think of "to bring him to." In their language, "we rubbed him, spanked him, threw cold water on him, held him under the pump, dragged him up a steep hill by the heels, and down hill by the hands, and at intervals gave him coffee, tea, whiskey, milk, and other domestic remedies." This was kept up all afternoon and night until 10 o'clock A. M., when they put him into a lumber wagon on a mattress and brought him to me, a distance of twenty miles, arriving at 2 o'clock P. M. After looking at the man and hearing a history of the case from those who brought him to me, I confess I was puzzled. I had him taken to a comfortable place and immediately gave him one drop of oleum croton, incorporated with equal parts of rhei pulv. and sugar, which moved his bowels easily and thoroughly in two hours. I then gave some placebo remedy to entertain his anxious friends, while I sought the seclusion of my office for study. I visited him again at 8 o'clock P. M. I was astonished on entering the room to find him sitting up in bed laughing, talking, and smoking a cigar. The land-lady told me that he ate an enormous supper of bread and butter, beef-steak, and potatoes with gravy, drinking three cups of strong coffee. I remained with him for a while to hear his story of his previous day and night's experience in language more forcible than eloquent. He corroborated the story told me by his attendant in the afternoon, and the wonderful effort he made to defend himself from the rough usage accorded him by his friends, and not a muscle would respond to his will. After prescribing quinine and strychnia and giving some general directions to the nurse for his care I bade him good-night, and left him apparently in perfect control of all voluntary muscular movements. May 18th I visited him at 8 o'clock A. M., and found that patient had rested well during the night, had eaten a hearty breakfast, smoked a cigar, and was in a merry, cheerful mood, laughing and joking with those around him. He complained only of feeling sore, which was attributed to the usage he had received before being brought to town. His wife, who lived twelve miles in the country, came at this visit. I gave the charge of medicine into her care, and left feeling greatly encouraged. At 11 o'clock A. M. I was notified that the patient had returned again to his peculiar condition. I requested the consultation of Major Adair, chief surgeon at Fort Robinson. After looking the case over carefully, and talking with his wife, we concluded it was a case of suspended volition, due to some mental emotion, continued the strychnia and substituted damianna for the quinine. I will now follow my notes to the termination of the case:

He remained in this condition until 2 o'clock P. M. on the 19th, after which he again talked and had normal use of all muscles, eating a hearty supper, and resting well that night. At 5 o'clock A. M. on the 20th he again lapsed into this peculiar condition and remained so until 8 o'clock P. M. on the 21st. His wife having to go home, on account of the children, took her husband with her. He again became this way at 10 o'clock A. M. on the 22d, and remained so until June 1st, when he again regained control of himself three hours. He also regained control of himself for a short time on June 7th and 11th. At this juncture a neighboring physician had sent him word of his ability to cure such diseases, and by the advice of friends he was taken to the neighboring M. D. for treatment. He remained there until about the 15th of July when his wife and friends returned him to his home discouraged, he never having gained control of himself during all this time. He died July 27th at 11 P. M., from symptoms indicating an overdose of strychnia; never having spoken or moved since June 11th. He could always swallow things put into his mouth, eating quite heartily the evening he died.

His family history, as near as I could learn, is as follows: Age, 34; German; grand-father committed suicide; father drank himself to death. Patient had cataract of left eye; had impaired vision of right eye. He claimed having had a cataract removed from right eye, but I could detect no indications of such an operation having been performed. We learned from his wife of his sexual weakness, which was the reason for giving damianna.

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1893.

Digitized by Google

Autopsy 18 hours after death: Patient fairly well nourished, brain weighed 56 ounces. I could find nothing to account for such a train of symptoms. I was allowed to proceed no further with the examination.

SYME'S OPERATION AS A PROTHETICAL EXPEDIENT.*

BY P. H. SALTER, M. D.,
NORFOLK, NEB.

In 1891, at the meeting of the National Association of Railway Surgeons, held at Buffalo, New York, Chas. Truax read a paper entitled "Amputations in the Light of Prothetical Science." In the course of the article, after giving the proper positions for amputations above and below the knee, for the most satisfactory adjustment of artificial limbs, he says: "To briefly summarize them, we may adopt the following as our guide: Avoid amputating within three inches of the knee-joint. Do not amputate between the metatarsal bones and the junction of the lower and middle thirds of the tibia. At all other points, save all you can, and you will, in every case, have done the best for your patients." This also seems to be the opinion of most of the artificial limb makers, and, as a result, many surgeons hold the same views.

Not more than two years ago I had two other practitioners to assist me in performing a Syme's operation. They both advised amputating at the "point of election" in the leg rather than at the ankle joint, as I proposed, quoting the advice of Truax as their grounds for such opinions, and I have since heard the same views expressed by others of the profession. Now I believe that this idea is most erroneous, for the following reasons:

First—Because a good artificial leg can be manufactured to fit either a Syme's or a Pirogoff's stump; as witness the number who are wearing them to-day to their eminent satisfaction. I myself have four patients who are wearing artificial limbs on Syme's stumps, and every one of these are perfectly satisfied. Two of them are railway men, and both, so far as I know, working as brakemen. One is a farmer and follows the plow, and the other is a book canvasser. Everyone of these men have expressed to me their satisfaction as to the results of the operations and the ease with which they can get around and attend to their several duties.

Second—A false leg can be worn with greater ease and comfort on a good stump at the ankle, and moved more dextrously than one applied to a shorter stump. I have yet to see a man who wears an artificial limb on a leg, even where there was left five or six inches of the tibia, who did not complain of his being tired after a walk of one or two miles; and per contra, I know personally five or six who are wearing them on stumps amputated at the ankle, who will walk for half a day without having any excessive discomfort. I have one case that particularly well illustrates this. A year ago last December I performed a synchronous amputation on a man who had been run over by a railway car. I removed the right leg at a point between four and five inches below the knee and the left by a Syme's operation at the ankle. He was fitted by a well-known Chicago maker with artificial legs. The right, as you will see by the accompanying photograph, is the more symmetrical and pleasing to the eye. The left is larger at the ankle and has rather a clumsy appearance, although this is not noticeable when covered by the pants. As to the comparative practical utility of the two, this man would tell you, were he here, that the right one is continually giving him trouble. If he takes a considerable walk, which, by the way, he does without aid from crutch or cane, his right leg soon tires, and if longer, becomes sore, from moving an equally heavy apparatus by a shorter stump, while the left gives no sign of weariness. At night, after a hard day's work, when he takes his false legs off, the right stump is tender, red, and swollen, the left in a normal condition. Several times during the past year he has had to stop his work, that of a canvasser, because of soreness in the right leg, never from the left. This man, and another, whose photograph I also pass around, can bear their whole weights on the ends of their Syme's stumps and walk on them. In all the cases of Syme's operation which I have known personally the patient has been able to carry his whole weight on the end of the unprotected stump. In fact, I have known them to use an ordinary shoe, padded at the heel, and get around in it with ease. This second case wore such a make-shift for some four months after recovery. He went away about four weeks after the amputation, and as I had not heard from him for some time, I asked one of the railway boys how Romer was getting along. He said: "I guess he is all right. I saw him jumping with some of the boys at Fremont the other day." He has since then gotten him an artificial leg, and is now working as a brakeman on a freight train.

Third—The mortality from amputations at the "point of election" is in proportion to that of a Syme as greater than four to one, a tremendous percentage and argument in favor of the latter operation. If, then, having decided to remove the foot at the ankle rather than four or five inches below the knee, which procedure is preferable, Syme's own or Pirogoff's modification? I think the weight of evidence is in favor of the former. The mortality is slightly less, being as nine to ten in favor of Syme. In a Pirogoff we have the danger that the os calcis will not unite, and will have to be removed by a subsequent operation. I have myself seen this occur twice in the Edinburgh Royal Infirmary, and I find mention of the same result by several of our best-known

* Read before the Nebraska State Medical Society, Lincoln, May 20, 1896.

Digitized by Google

operators. The period of recovery is shorter in a Syme's, for obvious reasons. The stump is better, because the heel pad comes more directly under the ends of the bones in a Syme than in a Pirogoff. And finally, according to Professor Stephen Smith, of New York, the former is better suited than the latter for the adaptation of an artificial limb. It is, I am sure, unnecessary for me at this time to describe the operation or any of its many modifications, of which the most important are those of Roux, Pirogoff, Ferguson, and Le Fort. Mr. Joseph Bell, of Edinburgh, Syme's greatest pupil and admirer, has modified his preceptor's method by preserving, whenever it is practicable, the periostal covering of the calcaneum, and I think that Mr. Syme's own mode of procedure, with Mr. Bell's modification, gives the best results.

There are one or two points which I wish to bring to the notice of those who have not used this operation, that may aid them in the performance of it. The first incision must pass directly across the bottom of the heel by the shortest possible route, from tip of the external malleolus around the foot to a point directly opposite, which is about one-half inch below the apex of the internal malleolus. This cut must be carefully made. If it go too far forward on the sole of the foot, the operator will find great difficulty in reflecting the flap over the prominence of the os calcis, or, if made too far back, he may find his flaps will not cover the bones, and it will be necessary to cut off more of the tibia and fibula, thus opening into the medullary canals. With strict asepsis it is unnecessary to use a drainage tube, as Syme in his description advises.

To summarize, I would change Mr. Charles Truax's advice to read: "Avoid amputating within three inches of the knee-joint. Do amputate between the metatarsal bones and the junction of the lower and middle thirds of the tibia, if you can do a Syme, and you will have done the best for your patient."

REPORT OF SURGICAL CASES.*

By JOHN PRENTISS LORD, M. D.,

PROFESSOR OF PRINCIPLES AND PRACTICE OF SURGERY, CREIGHTON MEDICAL COLLEGE; ATTENDING SURGEON TO ST. JOSEPH'S HOSPITAL, AND CONSULTING SURGEON TO PRESBYTERIAN HOSPITAL, OMAHA, NEB.

CASE I.—An unsuccessful case of thoracoplasty for relief of empyema. A. S., male, 19 years, admitted to St. Joseph's Hospital March 13, 1896. *Status præsens:* A sallow, very emaciated and anemic subject, with pulse of about 175, temperature 103, and scarcely able to walk. Very much stooped, right shoulder very low, and right side of chest sunken to a marked degree. Seven sinuses at various locations over right hypochondriac, iliac, and lumbar regions, which emitted great quantities of very fetid pus. Chondral cartilages of seventh and eighth ribs protruded through two of these sinuses. In November, 1893, he had suffered an attack of pleuritis, with effusion. In March, 1894, following, after almost continuous poulticing, it had commenced to discharge pus from the site of a former sinus between the seventh and eighth ribs, below nipple. Been discharging continuously since from the various sinuses, which are very tortuous. Tissues of side now very much infiltrated. There has been no cough. Patient considered too weak to withstand anything more than a slight operation. About two inches of sixth and seventh ribs were exsected and about two quarts of pus allowed to escape. Free drainage and irrigation was maintained for about one month, together with such tonic restorative treatment as was demanded. Marked improvement followed, pulse 80, good appetite, and much improved general condition. Microscopic examination revealed no tubercle bacilli in the pus. Schede's thoracoplastic operation was done in two stages, about one week apart. During the first operation the incision extended from the nipple downward and backward, corresponding to the lower limits of the cavity, and upwards internally to the angle of the scapula. After dissecting up all the tissues overlying the ribs, the chest wall was excised with bone forceps. Fearing that the patient could not bear more, further operation was deferred until one week later, when the incisions were extended and the remainder of the chest wall removed, including the second rib, which is not included in the regular operation as performed by Schede on account of its proximity to the axillary vessels. The rib was removed with due care and was removed to still further facilitate the collapse of the chest wall, because the cavity in this case extended behind clavicle, so that the transverse process could be seen on the first dorsal vertebra. Thus the whole chest wall was removed from the cartilaginous junction of the ribs in front to the tubercles behind; but even with this done the result was disappointing in getting sufficient collapse to completely obliterate this cavity, which represented an entire absence of the lung. The walls of the cavity were curetted, but not as much as recommended or desired, because of the waning strength of the patient. The wound was sutured and sufficient gauze introduced under and behind the clavicle to fill the remaining cavity, which could not be obliterated. The wound was dressed at intervals of two or three days thereafter. Reaction was delayed thirty-six hours after the operation, when the patient did well until the second week, when attacked with diarrhea from the effects of prolonged suppuration, his appetite and general strength failing until he died from exhaustion, three weeks after the last operation. In this case too great inroads had

* Read before the Nebraska State Medical Society, Lincoln, May 20, 1896.

Digitized by Google

been made upon the vitality of the patient to enable him to withstand so formidable an operation. The result would have been the same even though he had continued with ample drainage. This suppuration would have produced secondary changes which would have cut him short. Had this case been secured for treatment somewhat earlier, success would probably have been attained. Such results are but the aftermath of such shocking neglect. I must again express my disappointment in the failure of this most radical procedure to obliterate this cavity in this case. A division of the clavicle would have been necessary to have accomplished this result in this case.

Case II.—Fatal uremia, following supra-pubic-cystotomy and internal urethrotomy, for relief of retention, caused by organic stricture. E. O'H., laborer, 29 years, single, a muscular, wiry subject of apparently perfect physique, sought relief for retention at St. Joseph's Hospital, May 5, 1895. History of gonorrhea fifteen years previously, since which time more or less difficulty in urination. At times recently urine voided drop by drop. Complete retention day previous to admission, when he sought relief from physician in neighboring small town. After repeated ineffectual attempts had been made to enter his bladder, he sought relief in a neighboring city. After a repetition of the former experience, his bladder was tapped by a trochar above the pubis at 2 A. M. May 5th, the day of his admission to the hospital. First seen by me about 6 P. M., when his bladder was found to be fully distended and night coming on apace. His penis, scrotum, pubis, and perineum were swollen, tender, and excoriated from the repeated manipulation of the parts. All attempts with the various instruments at my command failed to reach the bladder, after use of cocaine and chloroform anesthesia in turn, when it was determined to open his bladder above the pubis, which was done after assistance had been secured. An inch and three-quarters incision was made and bladder lifted into and secured to wound by worm-gut sutures, re-enforced by fine cat-gut to guard against extravasation. With approaching darkness it was thought best to simply tap bladder with trochar, with drainage attached, and allow case to wait until perfect adhesion had taken place between bladder wall and belly wound. The second day following, when he was put on the table, he was observed to be jaundiced. Chloroform administered and wound in bladder enlarged, and a searcher with a strong curve introduced into bladder and caused to traverse urethra from behind forward, which was accomplished, though with some difficulty. This was returned, followed by a metal catheter in contact, which was carried through cupra-pubic wound and a filiform bougie passed through it, when catheter was withdrawn. An Otis dilator and urethrotome were introduced over filiform as a guide, and the urethra dilated and incised through the membranous portion, which was the site of the stricture. A soft catheter having been attached to the filiform, the catheter took its place as it was withdrawn. Fenestras were made to admit of free drainage from the bladder, and catheter was secured by safety pins both above pubis and at meatus. When patient was dressed and irrigated next day icterus was very pronounced, and patient, though able to walk to dressing-room, complained of much weakness and muscular pains. The same night marked symptoms of uremia manifested themselves, and grew worse in spite of treatment. The unfortunate subject died after repeated and prolonged convulsions on the night following, less than six days from his attack. Post-mortem revealed gastro-duodenitis, with obstruction of common duct of gall bladder. Liver large, icteric, and mottled, gall bladder containing very thick, tarry bile. Kidneys large, mottled, with marked macroscopic changes, indicating chronic interstitial nephritis, with an acute exacerbation. The left and larger kidney contained pus, both in pelvis and in its structure. There had been no extravasation from the wound site; in fact, its condition was perfect. Microscopic examination proved naked eye observations of the kidney lesions, etc. Here is another one of the cases in which the surgeon, self-satisfied with his power to relieve his fellow creatures, after work well and conscientiously performed, has his spirits rudely humbled by an unsuccessful case—death after operation, the people say, and we cannot unload the burden. The lesson to learn from this case is to suspect this very condition, so likely to exist after fifteen years of stricture. This obstruction being a most fruitful source of consecutive renal disease, and should cause all physicians to warn their patients with strictures to keep them patulous, and in a similar case to be mindful of possibilities and contingencies.

Case III.—Urethro-vesico-vaginal fistula, resulting from forceps delivery, in a woman upon whom symphyseotomy had been performed in a former delivery. Mrs. M., 25 years, height 4 feet 7¾ inches, weight 95 pounds, the mother of a child three months old, presented herself for treatment April, 1896. During the delivery of her child, which was effected by the use of forceps, she had sustained injuries which had resulted in urinary incontinence. About six weeks previously had been operated upon for relief of this condition, with partial success. Upon examination she was found to have sustained a tear anteriorly. That this had taken place because of the wide separation of the pubic bones at the symphysis. The line of separation of the soft parts having been extended through the vestibule up to the clitoris, involving the posterior or inner part of the urethra, extending on into the base of the bladder,

Digitized by Google

which still presented a large defect, notwithstanding it had been partially repaired. Her condition was most wretched, because in any position the urine dribbled away continually and the patient's skin was red and excoriated. When lying upon her back there was a separation of two fingers' breadth between the pubic bones, which could be increased to two and one-half inches upon pressure over iliac bones. The bones could readily be brought into apposition by lateral inward pressure. History obtained was that when delivered two years previously symphyseotomy had been performed; this failing, craniotomy had been resorted to. Her attendant during her last confinement informs me that he was unaware of symphyseotomy having been performed until after the injury had taken place. The patient now suffers considerable inconvenience in walking, particularly in going up or down stairs. As before stated, the tear extended anterior to the meatus, which was laterally located and nearly an inch posterior to the interior angle of the tear. A probe introduced into the urethra could readily be brought out through the fistula. After the edges of the defect were freely pared, it was fully two inches in length, and was united by eleven fine silver, shotted sutures. Complete primary union. Sutures removed at the expiration of one week. The day following the catheter slipped out. An attendant, ignorant of the abnormal location of the meatus, forced the catheter through the line of union into the bladder. A second operation was done as soon as the condition of tissues would admit. Primary union complete, though it was feared that the internal sphincter had been destroyed and that incontinence would be permanent because of the injury to the urethra. This did not prove to be true, for the restoration of function has proved to be perfect. The observations which I have to make in this case are that symphyseotomy should not be done unless delivery can be accomplished without craniotomy;* that there is evidently considerable danger of this very accident described—one of the most deplorable to befall a woman—where there is a wide separation of the symphysis; that in non-union after symphyseotomy great inconvenience in locomotion is experienced, as evidenced in this case.

MY LATEST IMPROVED BINAURAL STETHOSCOPE.†

By CHARLES DENISON, A.M., M.D.,
DENVER, COLO.

The results of experimenting with the stethoscope and the study of the laws of acoustics have led to some changes in the instrument called after my name. At the same time the competition among dealers has led to harmful cheapening of my original design, as made by Tiemann & Co., so that in some instances I cannot recognize my own child in the production I am supposed to father.

I, therefore, determined to accentuate the points proved essential, make needed corrections, and have the new moulds controlled so as to keep the instrument up to a desirable standard of excellence. With a few minor changes in the next lot to be made this desirable end will be reached.

The *large calibre* of the main tube, gradually decreasing as in deaf persons' speaking tubes down to the size appropriate for the ear ending, has been proved to be an essential feature in the correct stethoscope. As with light, so with sound, the angle of incidence and reflection are equal, and

the gathered sounds are not only transmitted in the substance of which the instrument is constructed, but in the gradually concentrated column of air which the tubes contain. The even division of this transmitted sound, so that the delivery is alike to both ears, has been proved by experience to be preferable to any other method. The substances of which the parts are constructed are most important considerations, which seem to be wholly unrecognized in the long, small, soft rubber tubes which are the chief features of some cheap and handy affairs.

If steel wire is imbedded in the soft rubber of the flexible tubes, and the size of these conveyors kept moderately large, with smooth surfaces inside, the best effects are produced, as in the instrument here illustrated. This is shown by a test which is a good one for all stethoscopes, for it is really the clearness, distinctness, and naturalness of the transmission which should establish a given instrument as superior, rather than any consideration of mere convenience of form for carrying, or of size as to looks.

* Accurate measurements of the pelvis were not made prior to operation, and it was found to be impracticable afterwards because it endangered the union.

† Read before the Colorado State Medical Society, June 17, 1896.

Digitized by Google

Here is the test: Place a watch on the table and cover it with the palm of the hand, while with the other you press the bell of the stethoscope firmly on the dorsal surface. If the two bells of instruments being compared cannot equally be imbedded in the flesh so as to equally exclude outside air, then put the back of the hand on the watch and press the bells in the palm. The best effects under such conditions determine the best instrument for cardiac and lung examinations, especially the former. The conditions are very similar to those existing in the test named as to the transmission of the sound through bone and flesh combined, with this difference, that in the test given, the table top underneath the watch gives a drum-like reverberation and exaggeration of the watch ticks which fulfills the requirements of a definite as well as a delicate test. Thus a weak ticking watch will have the movements of its machinery detected by one stethoscope of which no sound at all is audible by another. And here the fact is made evident that a proportion of listeners —and I suspect no small proportion either—are just enough defective in hearing to have to depend almost wholly on the sound transmitting substance of which their instruments are made. To such the large sized tubes, with the imbedded steel wire coiled in the soft rubber, are great helps, while the long, soft tubes, which allow of sound transmission only through the air columns within, are of no use whatever.

Make every allowance possible for those few whose hearing may be acute enough to hear passably well with the latter, there yet remains a majority to whom the former gives clearer and more satisfactorily transmitted sounds. This sound transmission is intensified by pretty firm pressure of the ear tips into the external auditory canals, and this desired pressure is afforded in the adjustable control attached to the purposely made stiff spring between the two arms. Everyone can thus limit the amount of pressure he can stand by his own comfort. The direction of the auditory canals with reference to the side of the head is more constant than the size, and this latter variation has seemed to make it necessary to have a choice of sizes of ear-tips. These I have divided into three regular sizes and had them made interchangeable on the uniform screw ends of the tubes. The medium sized ear ends will fit the majority, while, of the remainder, more will choose the smallest than the largest size.

This, my latest invention, is found to be of great advantage. The direction of the ear ends may be varied if required by heating in hot water and binding the tubes down; but assuming that the arms of the stethoscope are usually held close to or under the sides of the jaw, the direction of the ear tips should then be *inwards* and slightly *forward* and *upward*. This is the regular curve to which these arms are moulded.

The method of joining the tubes, and of inserting the bells in the main tube, is definitely settled as best by the insertion of slightly conical ends into the openings.

The bell endings are four in number, and each variety has its distinct purpose. The end of the main tube is rounded out and made slightly flaring at its extreme edge to form the smallest bell suitable for examining children's chests and for differentiating heart lesions, etc.

The ordinary sized bell is also made flaring at its border so as to give a good impinging surface against the chest wall, as thus sound transmission is aided, and the soft rubber bell is made thin and of size to project over the edge of the medium sized bell the fourth of an inch or less, thus closing all uneven places on the chest wall in examining much emaciated persons.

Stethoscopic percussion, for which I have devised this large bell—diameter three inches—is what I make a particular point of in outlining cavities and detecting softening, and I very much wish the profession practiced it more universally than they do. It is such a nice evidence of those serious states of lung tissue, so definite and assuring often in its import, that I may be excused, I hope, for describing it more minutely in this connection.

The object is to get a concussion of the air in an open space in the lung, or a succussion when such a cavity is partly bathed or filled with fluid, so that the impression is conveyed along the bronchial tract and out of the patient's open mouth. Then it is caught in the large bell and conveyed to the listener's ears. Of course this must be during expiration, because then the chest wall is more relaxed and impressible, and the sounds are helped along by the outward bound current of air. The physician sits or stands in front of the patient, while the assistant or the patient himself holds the large bell in position about an inch in front of his open mouth. Then during long, full expirations, the examiner makes forcible or light percussion as indications require, to find deep or superficial evidence of excavation. There is a "cracked metal" and hollow sound over dry hollow spaces, and a changed succussion sound over moist cavities, which is usually quite definite, and which can be outlined on the surface of the chest —with an easy marking pencil—in a way which is very definite and gratifying. In fact there is no diagnosis that I know of equal to it in determining the limits and size of an excavation out of sight, even as when it lies underneath a shoulder blade. In corroborative evidence of the indications furnished by other signs, and certainly of conclusions as to the limits of lung destruction reached, there is no sign more important than this one rightly interpreted. In the estimation of advanced tuberculosis in the lungs it is very important. I speak with the more emphasis on this point because I know I have met with many cases of softening already begun, and in others even of excavation established, which had not been pre-

Digitized by Google

viously detected, solely, I think, because this stethoscopic percussion had not been tried.

The stethoscope here presented and illustrated has given me much satisfaction, as certain defects or changes, incident to age, make me more dependent upon such an instrument. I hope you will agree with me that even if it is not exactly perfect, it is nearly so.

AN UNFORTUNATE BUT INSTRUCTIVE CASE OF MIDDLE EAR DISEASE.*

BY H. GIFFORD, M. D.,
OMAHA, NEB.

On February 25, 1896, F. K., aged about 45, came to my office with a suppurative otitis media of the right side, which had been continuing, with considerable pain in the ear, for some weeks. I found a small perforation in the posterior lower quadrant of the much-congested drum-head, with a moderate non-fetid discharge. There was no tenderness, swelling, or redness over the mastoid. Under cocaine the perforation was enlarged, but the bleeding was so profuse that I was uncertain whether any considerable amount of pus was evacuated at the time. The patient then entered the Clarkson Hospital, where treatment by irrigating the meatus with hot boracic solution, with instillations of a mixture of pyrozone and boracic acid solution was begun and kept up for three days, when, as the hot irrigations rather increased his headache, they were discontinued and the medicinal treatment for the ear to the end of the case, was confined to instillations of pyrozone and boracic solution, four or five times a day, after syringing out the meatus. The pain in the ear disappeared within twenty-four hours after the paracentesis, and the patient continued to improve, though slowly, for the next five days. He complained a good deal of sleeplessness, however, and of vague pains in the head, and sometimes in the forehead, sometimes in the occiput, but never localized over nor near the ear. He also complained, quite steadily, of pain in the right shoulder, running up toward the neck. The temperature ranged from normal to 98.5 until March 2d, when it went to 99.4. About this time he complained of diplopia in looking at distant objects, and I found him to have a very slight paresis of the right external rectus, which, however, rapidly got better. After a few days diplopia could only be noticed by close attention to very distant objects. On March 3d the temperature was 99.8, with a lessened discharge, and a sense of fullness in the ear and increased discomfort in the head. As the opening in the drum-head seemed to be diminishing in size, I again enlarged it, whereupon, with increased discharge from the ear, the patient became much more comfortable; temperature sank to normal or thereabouts, and the improvement continued so that he left the hospital March 7th, with the understanding that he was to come to my office for treatment. He did so, however, only occasionally, and as he lived in a business block, with meager conveniences, I was not surprised when, about March 18th, he again complained of increased discomfort in the ear and shooting pains in the head. I then, for a third time, made a paracentesis. The improvement after this was not so prompt as on the other occasions, but on March 27th, not having seen him for several days, I visited him at his room and found him feeling perfectly well. The discharge from the ear had ceased entirely, the opening in the drum-head had nearly closed, and the drum-head was assuming a normal aspect. Congratulating myself on the successful termination of a troublesome case, I did not see him again until the morning of March 30th, when, on being called to see him, I learned that he had seemed perfectly well up to the evening of the 29th, when he was taken rather suddenly with pain in the head and back, which had continued without intermission and with increasing severity. I found him with pronounced symptoms of meningitis, besides the pain in the head and back. The patient was at times only half-conscious; temperature 103; pupils were normal and the ophthalmoscopic examination negative. There was no discharge from the ear and no sign of any accumulation in the tympanic cavity. In view of the fact that the ear had seemed entirely well for some days, and that he had at no time had any of the ordinary symptoms of a mastoid abscess, I thought it probable that the meningitis had no connection with the ear trouble, but that both had started with an obscure attack of la grippe some weeks before. I was the more inclined to this view, as I had just read the report of several cases in which the influenza bacillus had caused meningitis. The patient was then removed to the Presbyterian Hospital, under the care of his family physician, and I did not see him again, but I am told that on the next day a marked convergent strabismus of the right eye developed and the pupils became uneven. Consciousness was gradually lost and the man died at 2 o'clock on the morning of April 1st.

A post-mortem was held on April 3d, at which I was not able to be present, but I have learned from Dr. Detwiler, who made the autopsy, that all the meninges were found very much congested, with a diffuse purulent inflammation at the base of the brain, an extra-denal abscess in the right temporal fossa, this evidently having had its origin in a perforation which existed in the roof of the right tympanic cavity. There was no abscess in the brain substance and the sinuses were free, but the mastoid antrum, while not containing pus, was full of the flabby granulations which indicated that it had not long before been a pus cavity.

To resume, here was a man who at no time had any of the ordinary symptoms of mastoid dis-

* Read before the Nebraska State Medical Society, Lincoln, May 21, 1896.

Digitized by Google

ease. I was never able to elicit any tenderness on pressure. There was not the slightest sign of swelling or redness, and the bulging of the upper posterior wall of the auditory canal was absent. Nor did he at any time, until a few days before his death, give the impression of a man who was at all seriously ill. The pain in the ear, which was present when I first saw him, disappeared within a few days thereafter and did not return again, though twice, at the times mentioned in the history, there was a sense of fullness in the ear for a day or two, disappearing after the perforation in the drum-head was enlarged. The pains in the head of which he complained off and on were never localized on the side of the head, as is generally the case with an extra-denal abscess, and the patient's description of them gave more the impression of neuralgic pains, and as he was of an extremely nervous temperament, I did not give them the weight which, in the light of later developments, they evidently deserved. Until the onset of a well-marked meningitis his intellect was not at all affected. Finally, for several days before his severe symptoms developed he seemed to be a perfectly well man, and if it had not been for the post-mortem I should have continued to think that the meningitis occurred independently of his ear trouble. The post-mortem, however, made it plain that a mastoiditis had been going on for a considerable length of time, and an operation done at any time before the onset of the severe symptoms would probably have saved his life. Whether it would have done so after the meningitis developed is, of course, doubtful, many surgeons advising against operating under such circumstances; but some cases have been saved by the operation even after meningitis appeared, and if I had believed, as I did not, that the meningitis came from the ear, I should have advised an operation in this case.

In looking back over the history, to learn what symptoms should have led me to a more accurate diagnosis and a more efficient treatment, the only ones which it seems to me that I slighted were the sleeplessness and the paresis of the external rectus; but the former was not more marked than I had seen in other cases without cause for alarm, while the latter was so transitory and occurred at a time when the patient was feeling so well that I thought it a mere coincidence, as a paresis of the external rectus is not uncommon with patients otherwise in good health.

It has long been my opinion that nearly all of the cases in which an acute inflammation of the middle ear leads to a suppuration which fails to heal promptly under proper treatment are complicated with an inflammation of the mastoid antrum. Yet so many of these cases eventually heal without serious consequences that one would not be justified in opening the mastoid at once every time an implication of the antrum was diagnosed. The problem here is the same as that confronting the surgeon in dealing with appendicitis or salpingitis. If he operates on all cases, he will operate on many that would get well of themselves or with less radical treatment. But I have always held that it is better to operate on twenty cases unnecessarily than to let one die for want of an operation. Hereafter I think my position will be even more radical.

In conclusion, to illustrate more fully my point of view with reference to this case, let me add that I am not at all "shy" of mastoid operations, nor of opening the cranial cavity if necessary; on the contrary, I am very fond of this kind of work, but in the present case I unfortunately did not feel justified in proposing any serious operation.

THE TREATMENT OF APPENDICITIS.

By H. J. WINNETT, M. D.,
LINCOLN, NEB.

In the treatment of these cases, each of us who does not believe an operation always necessary, sometimes in our professional career stands between the devil and the deep sea, while the patient's life hangs in the balance. By most men, both surgical and medical, there is a pretty general agreement that there are cases in which the medical treatment alone is indicated, while all admit that there are other cases in which surgical treatment alone is to be employed. So far there has been no rule given us by which we can, in a given case of moderate severity, draw the line between medical and surgical treatment with a degree of accuracy satisfactory to ourselves. Statistics giving the death rate in this disease, without operation, seem to be hard to find.

Dr. Revilliod, of Geneva, reports 70 cases treated, 11 of them being cases of suppuration, with 4 deaths, or about 5 per cent. His rule is: "When in doubt, do not operate."

Bryant says there is no doubt but that from 60 to 80 per cent will recover from a first attack.

Dr. Huntington, of Montreal, says he has interfered and prevented operations twenty-five times, and only once had reason to regret it. Hence in these cases that were supposed to be ones for operation the death rate was 4 per cent.

Ewald states that at least 90 per cent of the cases recover without the knife.

Vollert reports 65 cases treated, with 3 deaths, less than 5 per cent mortality.

Dr. Murphy has reported 145 cases up to the beginning of the year 1894, in which there was a mortality of about 11.3 per cent. He also reported 48 cases January, 1895, in which his mortality was 5 deaths, or about 10.2 per cent. In these reports of Dr. Murphy's cases we are led to the belief that he operates on all cases as soon as he is convinced he has a case of appendicitis to deal with, for his rule, as laid down by himself, is "First, last, and always, operate in every case of

Digitized by Google

appendicitis, promising or unpromising, at the earliest possible moment."

Dr. J. W. Goulby, of New York, has recently seen 24 cases in which he had refrained from operating, and all have ended in recovery.

Dr. McLean has seen many cases, in which the symptoms seemed to demand immediate operation, recover without it.

Dr. Ferguson says out of about 20 cases seen annually, about 3 demand operation.

Dr. Miles Porter has tabulated 448 cases, of which 371 recovered and 77 died. One hundred and fifty-one of these cases were operated on during the attack, the mortality being 29, or about 18.5 per cent. Fourteen were operated on during quiescence, with one death, or about 7.05 per cent. One hundred and eighty-eight were operated on by incision and drainage, with 34 deaths, a death rate of 18 per cent. Ninety-five cases treated without operation, with 13 deaths, or 13 2-3 per cent.

Dr. McCartney, of New York, reports twenty-six consecutive cases and no death.

Swain maintains that 90 per cent will recover without operation.

Wyeth says: "In my entire experience with this lesion, I have yet to see a death which could not properly be ascribed to delay in timely and skillful surgical interference."

McBurney says if a mild case "does not begin to improve in thirty-six hours, operate."

Dr. Briggs, Dr. R. T. Morris, and in fact most of the leading surgeons, advise immediate operation. My own experience, and probably the experience of most men in general practice, is that we do not see these cases at the beginning of the attack. Unless it be an unusually severe one, it is the second, third, or fourth day that we are usually called to them.

Our duty, as conscientious physicians, to these unfortunate people is to give them the best possible chance for their lives. Wyeth says operate on all cases; but he qualifies that assertion by the word "skillful," and has said "had he the disease, unless he could choose his operator, he would go to bed, take opiates, and his chances." Of all the operations of the abdomen, none require more skill, more experience, and perhaps none has required the sacrifice of so many lives in acquiring the necessary skill and experience. The theory, based on the pathology of the disease, to operate on all cases is correct; but we do not believe that results justify the procedure. That one word skillful has great weight when thrown upon the scales in which a human life is to be weighed. For Wyeth, Morris, Murphy, and others so situated to operate is one thing. For a thousand others of us, differently situated, without experience or opportunities of obtaining it, perhaps without the natural tact and dexterity, and what we have uncultivated, is another thing. "Two swallows cannot make a summer." Neither can two operations make a surgeon. It is sad, but too true, that ambition to do what other men do, whether it be for the good of humanity or not, is transforming many good physicians into very poor surgeons. Our surgical friends, at least some of them, seem to think that we who are more conservative, and do not believe that every case of appendicitis is one for operation, are not up to date. We are cowardly, and they call us poultice and opium doctors.

An operation for the appendix and one for appendicitis are two separate and distinct operations. Beverly Cole, in his address before the American Medical Association, said: "It seems that every tyro imagines that surgery offers the quickest route to success, and that fame is to be attained only through blood; hence every case, the symptoms of which are directed to McBurney's point, was necessarily a case of appendicitis, for which the only sovereign remedy was the knife." Dr. McGuire says: "I am not always in a great hurry to operate, but I am inclined to wait for the more acute symptoms to wear off, and operate, if at all, after suppuration has taken place, or during the quiescent stage, between the attacks. I wish my voice was strong enough, just here, to call a halt to the men who say: 'Operate at once—not this afternoon or to-morrow, but now,' in all cases where the disease is recognized."

After carefully looking up the subject, I am led to believe that the death rate from this disease, considering all varieties, without surgical treatment is from 5 per cent as a minimum to 13 per cent as a maximum. While the death rate from cases treated surgically has 10 per cent as a minimum. The maximum death rate in cases operated on is unobtainable and would cut no figure, as it would only include, in many instances, hopeless cases at time of operation. From the foregoing we conclude the chances for life under the two methods of treatment, when all are operated on or all treated medicinally, is safer under medical treatment. However, we do not believe all cases should be treated medicinally; neither do we believe all cases should be operated upon. There is a middle and safer ground to take.

I hope I shall not be misunderstood, for it is not my desire to undervalue the services of any man or any class of men. Too high an estimate cannot be placed upon the services of the surgeon; but the craze for operations during the past few years is strewing the pathway of many men through life, not by death alone, but with scores of unfortunate beings to whom death would be a boon. When we speak of operations for this by men having the necessary training, the nurses, and hospitals, it is very different from an operation performed by men with limited experience, incompetent nurses and assistants, under circumstances as ordinarily exist where these cases are found by the average man. To teach the young men who go out from our colleges that they are to operate on every case of appendicitis as soon as a diagnosis can be made is certainly unwise, and

Digitized by Google

almost criminal. To teach them to send for their instructor to do the operation may be all right, but very inconvenient and expensive to the patient.

There are cases for operation, and many lives have been saved by it, but on the other hand many lives have been lost as a result of the operation. All of us have seen cases that looked to be hopeless get well. One case in particular, I remember, where I abandoned the case and refused to bear the responsibility because operation was refused; yet the case recovered, and now five years have passed and there has been no relapse.

There are cases, classed by some as fulminating peritonitis, in which the appendix is perforated and a general peritonitis of a very grave character set up at once. It is my belief that in most of these cases this has occurred before the physician is called, and some surgeons say it is useless to operate on them; but it seems that all of these cases should be operated on at once, for there is nothing to lose, but everything to gain. It is true, they all die without operation, and most of them die with it. But the operation is justified from the fact that an occasional one is saved.

There are many things regarding the results of these indiscriminate operations to learn yet. We have not been told by most operators of the difficulties met with, how often they failed to find the appendix at all, or how often its lumen had been found obliterated; how often they have been mistaken in their diagnosis. We have had only meager information as to the number of relapses after operations. Nealaton tells us of one case on which he had operated three times.

Almost nothing has been said as to hernias or other unpleasant symptoms after operations. To sum up the matter of operations, we believe it has an important place, and, like operations on the cervix, tubes, and ovaries will find it after the storm goes by; but we may expect in ten years from now to see very few operations for this disease, compared with what we now see.

TREATMENT OF ENURESIS.—Dr. Sanger, of Leipsic, recommends a course of systematic dilatation of the urethra in cases of enuresis, both in women and female children. His plan is to introduce a metal catheter well into the bladder, keeping the thumb over the aperture. The instrument is then firmly pressed backward and to each side from eight to a dozen times. It is, of course, useless to make any pressure anteriorly, as the pubes lie immediately in front. Ten or twelve sittings are usually sufficient. During the treatment the patient is desired to control the sphincter as much as possible by means of the will, to take but little to drink and to keep the abdomen warm. The good effects of this mechanical system of treatment are to be ascribed to increased power gained by the sphincter in consequence of its contractions after dilatation and stimulation. This method is useful when the paralysis is of central as well as when it is of peripheral origin. When, however, the neck of the bladder and the whole urethra are of very large caliber it is useless, and in such cases a plastic operation is required.

MEDICAL MEN TO AVOID.—The one who has acute exacerbations of insanity when exposed to any one new fad. The one who always sees hundreds of cases of a rare disease. The one who can always match your case and improve on your treatment. The one who always finds you have omitted something in the examination of your case. The one who thinks he can talk well, and is always ready to discuss any paper of the evening. The one who is always ready to do the new operation. The one who is in chronic fear of being anticipated in his important discoveries. The one who in consultation feels it his conscientious duty to explain to the patient why he differs with the attending physician.—*Medical Record.*

IN Chester, England, there recently died a man who had distinguished himself by appearing before the city justices 130 times in the capacity of a criminal. His father had been tried thirty-five times, one sister sixty-seven, and another twenty-nine times, making a grand total for the family of 347 trials. The estimated cost of these prosecutions was $10,000. This is only one example of inherited criminal propensities, a knowledge of which must extend to the masses before popular opinion will demand that the state shall provide for this class of defectives as is now done for the insane.—*Medical News.*

ANCIENT ANTI-TOXINE.—There is nothing new under the sun, and the originators of anti-toxine must be accused of plagiarism. Pliny says that Mithridates, King of Pontus, made himself proof against poisons by gradually accustoming himself to all poisons. This he did by taking a mixture, the principal ingredient of which was the blood of the Pontic duck, which was said to live on poisons. Therefore the blood of an immune animal was used to make another animal immune.

IN the pain of urination caused by an excess of uric acid, give five grains each of benzoic acid and borate of soda in an ounce of water every two hours. The third dose will give relief.

ICHTHYOL has been found to have a remarkably efficacious action upon recent burns, relieving the pain at once and facilitating healing.

Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance,.....$2 00
Single copies..... 20

Address:

WESTERN MEDICAL REVIEW,
LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, JULY 15, 1896.

IT will be fifty years next October since ether was first used in surgical operations, and it is proposed to hold a jubilee celebration somewhere during that month. If it does not develop more enthusiasm in the profession than was in evidence during the Jenner celebration, it would be better to let the jubilation rest in peace and quietness till the centennial shall roll around. Then, possibly, there will be more appreciation for great men and great achievements than there is at present.

ANTITOXIN TREATMENT OF DIPHTHERIA.

The committee appointed by the American Pediatric Society to make an inquiry into the use of antitoxin treatment of diphtheria made a voluminous report at the last meeting of the society, held in Montreal, Canada, last month. Nearly all the reports heretofore made have had some point in them that would vitiate them in the eyes of the critical inquirer. Some have not had enough cases in them to be of any moment, some have been all hospital cases, some have been reports of cases in some particular locality, and not a few have been too evidently reported by men who were prejudiced one way or another. This latter objection is in evidence in too many of the reports for them to be of value. But in the report of the collective investigation made by the committee of the American Pediatric Society none of the objections referred to apply. The names of the gentlemen who sign the report carry with them assurance of honesty of purpose, and a guarantee of thorough and unprejudiced investigation. The success of the committee in securing reports of such a large number of cases is remarkable, and shows conclusively that the use of the serum has been much greater among the profession outside of the larger hospitals than was supposed. The committee secured reports from over six hundred physicians, and almost all of them were in favor of the use of the serum, especially in the early stages of the disease. These 615 physicians reported 3,628 cases, but 244 of these were excluded from the statistics. Only cases about which there could be no doubt were admitted into the report for statistical purposes. The report covers such a large amount of territory, 114 cities and towns and 17 states, that local peculiarities could not affect it. The large number of physicians whose experience makes up the report takes from it all suspicion of individual prejudices. To repeat, the report is complete in every respect and reliable beyond dispute. And what is the result of this investigation? Emphatically favorable towards the antitoxin treatment.

It is well known that cases under two years are more fatal than when over that age, and yet the table which shows up this phase of the subject shows that of the 867 cases reported, the mortality was only 23.3 per cent, which is very low for this age. Or, excluding cases that were moribund when the injection was given, the mortality is 19.2 per cent. All the tables given show favorable reports. In reference to the advantage of early use of the antitoxin, the first table given shows that where the antitoxin was used the first day the mortality was 4.9 per cent; on the second day it was 8.3 per cent; on the third day, 12.7 per cent; on the fourth day, 22.9 per cent, and on the fifth day, 38.9 per cent.

The most remarkable showing is in its effect upon laryngeal diphtheria, the most fatal of all forms. The results reported are positive and cannot be explained away. Of the 1,256 cases with croup, 563 recovered without operation, and the fatality in 533 cases of intubation was 25.9 per cent, including hopeless cases, or, omitting these, 16.9 per cent. These statistics are remarkable and prove beyond a doubt that in antitoxin we have pretty nearly a specific against diphtheria.

The summary of the report and the action of the society on it will be found in another column.

THE MEDICAL JOURNAL AND THE "READING NOTICE."

Under this head the editor of the *Journal of the American Medical Association* comments argumentatively on this practical subject in the July 4th number. Evidently some advertiser had "got

Digitized by Google

his back up" because a reading notice was not inserted in the reading columns, as requested, and the advertisement was taken out. The *Journal of the American Medical Association* prides itself, and justly, too, on the purity of its advertising pages. It also prides itself on keeping its scientific pages free from advertising puffs in any form. There are two classes of medical journals published in this country, one class in the interest of its advertising patrons, the other in the interest of its readers. The latter class, alas! is a very insignificant minority. Scores of the former have a big circulation without a solitary paid subscriber. This class pays; pays the publisher; whether it pays the advertiser or not is doubtful. It certainly is not a pleasure to sit down to read an article on some subject in which you may be interested, and suddenly find it is a puff for some drug. It is not conducive to mental equilibrium to find every other article you read only an advertisement of some drug house or proprietary medicine. Neither is it pleasant to find that every third or fourth page in your medical journal is an advertising page thrown in. And yet how few, how very, very few, publishers there are who have the courage to say no to all these nuisances.

The WESTERN MEDICAL REVIEW started out with the intention of having clean advertising pages or having none at all. It started out with the promise to have no advertising notices among the reading matter. And it promises to have no advertising pages thrust in between scientific articles. In other words, the WESTERN MEDICAL REVIEW is published in the interest of, and to give satisfaction to, its readers. If we cannot make a success of it published in this way, it will die. But it will NOT die.

HOW IS THIS?

Last month we published, under the report of the proceedings of the Nebraska State Board of Health, the fact that the application of W. F. Stouder, a graduate of the Physio-Medical College of Indianapolis, had been laid over for a month. Under the same heading this month the same name appears as having been granted a certificate to practice. On June 9th the Kentucky State Board of Health held its regular meeting. At this meeting, we read, "Representatives of the Physio-Medical College of Indianapolis appeared before the board and again requested that their diplomas be recognized by the board, but on consideration their request was refused." Comment is hardly necessary, yet if it is not too pertinent, we would like to ask why this school is good enough for Nebraska, when it is not good enough for Kentucky?

THE BRACELIN "REMEDY."

Dr. Bracelin, the inventor, discoverer, or whatever may be the correct word to use, of the Bracelin remedy for diphtheria, which has been so much puffed and advertised by the daily papers of Chicago, now comes out in the *Journal of the American Medical Association* and says that he is still in the ranks of the profession and repudiates the term "secret" as applied to his treatment. And here is his description of the "remedy:"

"The remedy consists essentially of chlorin, deprived of its suffocating, irritating qualities by an emollient corrective. The value of the 'corrective' is not so much due to the agents used as to the process of manufacture in making the combination. Properly made, the results will be satisfactory; if improperly combined the results will be disappointing. This is the result of my repeated trials and clinical experiments, carried on during a period of over three years. Two liquids are used, which are for convenience named 'Bracelin Chlorin Bactericide,' 'No. One' and 'No. Two.' 'B. C. B. No. 1' is set free by the corrected chlorin in 'B. C. B. No. 2.' 'B. C. B. No. 2' is added to 'B. C. B. No. 1' in the proportion of one to five parts, slightly warmed, and the vapor inhaled as directed. Some diseases, such as diphtheria and pneumonia, require its use once each hour; others but four or five times a day. I am now prepared to give my formula to the profession for trial in the treatment of diphtheria and throat and lung diseases, viz.:

FORMULA OF BRACELIN'S CHLORIN BACTERICIDE.

Solution No. 1.

Solution zinc chlorid.....	20 parts.
Solution arsenic chlorid.....	30 parts.
Hydrochloric acid.....	1 part.
Water.....	49 parts.

Solution No. 2.

Solution chlorinated soda, standardized to 2.6 per cent, available.

Chlorin.....	70 parts.
Corrective	30 parts.

"NOTE.—The corrective consists of menthol, camphor, eucalyptol and salicylate of methyl dissolved in alcohol and water. It will, I think, require no special argument to convince the profession that so chemically unstable a compound can only be prepared satisfactorily by careful and competent hands, and, as already stated, I shall hereafter personally supervise its manufacture for the use of physicians."

This sounds very much like an advertisement, but it may not be. It is not much unlike the ad-

Digitized by Google

vertisement we see so often where a receipt is offered free to cure a certain disease, and when the "receipt" comes it tells us that only one man in the country can prepare it, and there you are.

RECIPROCITY AMONG EXAMINING BOARDS.

A question of no small moment comes up in reference to state examining boards, which, while it may not affect many, will certainly be a hardship on some. A physician passes his examination and settles down to the practice of his profession, but after a while, from some cause or other, he decides to leave and go to some other state. And an obstacle confronts him. His certificate is all right in the state in which he has been practicing, but it will not admit him to another. And so he has to pass another examination. This may have been decidedly easy when he was fresh from college, and may be now in certain lines, lines in which he has been keeping up. But in other branches he may find himself decidedly deficient and rusty. His anatomy, his physiology, his chemistry, and several other branches, in which probably he prided himself at one time, he has entirely forgotten. Not only that, but in many states there will also be an examination in literary branches that he has not attempted to keep up. The only way to avoid this hardship and unnecessary trouble and expense, not mentioning the useless "brushing up" in branches that are never used, will be to establish reciprocity among the examining boards of the different states. This would be an easy matter were all examining boards governed by the same rules and had the same standard. New York could probably easily recognize the Minnesota certificate, but the standard of Nebraska will have to be changed considerably before the stamp of approbation of either of these states can be placed on her certificates. Just so long as the Nebraska State Board of Health is compelled to recognize the diploma of such an excuse for a medical college as is a certain mongrel concern in the state, just so long will its certificate be a useless piece of paper outside of the state in which it is issued. Whenever a sufficient number of states, say ten, have raised the standard, both from a literary as well as a medical standpoint; when these ten states shall agree on a minimum standard and exchange of certificates, it will not be long before the others will follow. It must surely come. Either we must have a national examining board or reciprocity among the state boards. For the time is fast approaching, or all signs fail, when a diploma from a medical college will not be evidence for qualification to practice. Here is the requirement that all the states are striving for, and which many have already: "A preliminary education equal to a high-school course. Four years' medical collegiate training, and a separate state examination for license after graduation." This is the standard that is to be attained by all the states, for after the majority have adopted it the minority will have to do so in self-defense. The only objection that we can see to this is the fact that in changing one's location a new examination would have to be passed. And we are ready to acknowledge that this objection is too small to be of any account when the blessings resulting from such legislation are considered.

ABOUT OURSELVES.

We have been more than pleased with the flattering notices given the WESTERN MEDICAL REVIEW by the medical press, and also by individuals. We should be glad to print them all, but space forbids. The following are fair samples of the many:

This is from the *Pittsburg Medical Review* for June:

A CLEAN NEW JOURNAL.—The first number of the WESTERN MEDICAL REVIEW, of Lincoln, Nebraska, appeared in May. Its general make-up is excellent; the editorials are independent and the current reading matter well selected. The following extract from an editorial will indicate the standard adopted by the editor: "Advertisements will be welcome and are solicited, but no advertising will be allowed in any form among the reading matter. Neither will any advertisement be admitted that is in any way fraudulent." Religiously adhered to, this high standard will soon force the WESTERN MEDICAL REVIEW into the front rank, if not the lead, of western medical journals.

The *New Orleans Medical and Surgical Journal* for July gives us this free puff, for which we return thanks:

The WESTERN MEDICAL REVIEW is the title of a new medical monthly published in Lincoln, Nebraska, with Dr. Geo. H. Simmons as its pioneer editor. The periodical resembles the *Johns Hopkins Bulletin* in its size and arrangement. The neatness and simplicity of its arrangement is quite refreshing. The contents are well selected, and presented so as to introduce most favorably the new candidate for medical patronage. We

Digitized by Google

wish the Review all the success a good start can bring with it.

The *Medical Fortnightly* says that the Review is "full of solid matter," and that "every line is readable."

The *New York Medical Journal* says that "it is an exceedingly creditable journal."

Dr. Lanphear—and everybody knows Dr. Lanphear—says: "Accept my congratulations on character, style, and size of your journal. It will succeed." Dr. Lanphear knows what he is talking about.

Dr. Moores Ball, of St. Louis, editor of the *Tri-State Medical Journal:* "I am much pleased with your journal and have placed it upon the exchange list of the *Tri-State.*"

But last, but not least, here is what we get from the *Indiana Medical Journal* for July. Of course we are willing to be used as a lash with which to touch up our strong and lusty contemporaries of the east, provided we are not hurt any more than we are in this case:

The "Medical News" of New York and the "Western Medical Review," Lincoln, Neb.—The *News* of June 20th (present editor Dr. J. R. Goffe in place of Dr. George M. Gould, of Philadelphia), speaks kindly of the new Nebraska journal:

"Western Medical Review is the name of a new monthly medical journal, edited by George H. Simmons, M. D., and published in Lincoln, Neb. We are in receipt of Nos. 1 and 2. They are fresh and breezy, first-class, clean, and every way up-to-date. We welcome the Western Medical Review to the ranks, and predict for it a most successful career, and a future full of usefulness to the profession of Nebraska and the west."

The eastern journals, strong and lusty adults, reared and supported by the wealthy publishing houses, are always patronizingly peering into the cradles of the new-born western journals to see if, possibly, the long hoped for medical messiah is ensconced therein. We hope the *News* will favor the Review with an exchange, a courtesy which so far has never been tendered the leading medical journal of Indiana, but for which we still hope.

And we are pleased to tell our friend in Indiana that the *Medical News* of New York has put the Review on its exchange list.

And this is from a little nearer home. Dr. George P. Clements, of Clarkson, sends his subscription and says: "I wish you success and will do all in my power to further what I consider one of the greatest steps the medical minds of Nebraska have undertaken for a long time—given a mouthpiece for the medical energy of Nebraska. May it be but a little while ere it be a weekly."

A "weekly" is too much to promise at present, but a fortnightly we hope to make ere many moons.

Notes and News.

The Woman's Medical College of Philadelphia has lengthened its annual course to eight months—October to June.

Thos. Barlow, F. R. C. P., has been appointed physician to the queen in place of Sir John Russell Reynolds, deceased.

Dr. John A. Wyeth is reported to have removed by operation a Murphy's button after it had remained in the bowels 127 days.

Dr. Arthur R. Elliott has been elected professor of preventive medicine and urinary diagnosis in the Chicago Post-Graduate Medical School.

Dr. E. W. Lee, of Omaha, was appointed a member of the nominating committee at the Atlanta meeting of the American Medical Association.

Dr. John S. Billings has received the honorary degree of doctor of medicine from the University of Budapest on the occasion of its millennial celebration.

Dr. W. C. McDonald, of Montreal, has recently given $500,000 to McGill University, which makes the princely sum of $2,000,000 which he has now given that institution.

William Reynold Salmon, M. R. C. S., of Penllyn Court, Cowbridge, Glamorganshire, South Wales, completed his 106th year on March 16th, and died on the 11th of May.

The population of London, according to the census taken last March, was 4,411,271. That of 1891 was 4,211,743, showing a gain of 200,000 during the five years. Query: Where will it end?

The medical department of the University of Worcester, located at Cleveland, has become the medical department of the Ohio Wesleyan University and will be known as the Cleveland College of Physicians.

Addition.—

Now 1 and 1 are 2, 'tis true;
But if the 2 do marry,
Then, in a year, 'tis also clear,
They're 2, and 1 to carry.*

—*The Mathematician.*

*Not if they belong to the fashionable set.

Digitized by Google

HARVARD UNIVERSITY has brought suit to enjoin a certain medical school in Chicago from using the name "Harvard" for their institution. The case is in the United States court and will be tried this fall.

A BUILDING FUND AND THE JOURNAL.—A resolution was adopted at the Atlanta meeting of the American Medical Association looking to the establishing of a building fund and the permanent locating of the *Journal.*

DR. T. A. STODDARD, of Pueblo, Colorado, recently brought suit against that city for $30,000 damages for injuries sustained in being thrown from his carriage by reason of the city's neglect in leaving a hole in the street.

DR. HENRY BARNES, of Carlisle, has been appointed president of the British Medical Association in place of the late president, Sir Russell Reynolds, who has just died. The next meeting will be held this month at Carlisle.

DR. H. S. VRADENBERG, of Sutton, Nebraska, was badly injured on July 9th while making a professional call in the country. His team ran away, and, throwing him out, fractured his scapula and badly bruised him generally.

THE late Professor Spaeth, of Vienna, left his whole estate for charitable purposes. The Society for the Care of Sick Students receives 400,000 gulden ($200,000), and 40,000 ($20,000) are set aside for the creation of a fund for indigent students.

DR. W. W. VAN VALZAH has been elected professor and Dr. J. Douglas Nisbet, adjunct professor, in the department of general medicine in the New York Polyclinic. Their lectures will be devoted to diseases of the blood and of the digestive organs.

THE *Journal of the American Medical Association* is urgently advocating the establishment of a National Department of Public Health, and keeps it before its readers by ending each editorial with the sentence, "Let us have a Department of Public Health." The cause is a good one, and the WESTERN MEDICAL REVIEW hopes in the near future to publish arguments in favor of it.

PROFESSOR EDWIN KLEBS has been elected to the chair of pathology in Rush Medical College. He was tendered a reception by Dr. Fenton B. Turck on the evening of July 2. Rush Medical College certainly ought to be congratulated on being able to add to its faculty so noted a bacteriologist and pathologist as Professor Klebs. He is an author of world-wide fame, and has been an authority since he published his "Hand-Book of Pathological Anatomy" in 1868. His fame rests mostly, however, on his great work on General Pathology, published in 1886.

DISAPPEARED.—J. C. Powell, who recently failed to pass the examinations of the State Medical School at Portland, Ore., disappeared after getting the notice of his failure. He was much depressed at the results, and it is feared he has committed suicide.

THE medical men of Detroit, Mich., organized themselves into a league some time ago, and on May 21 they perfected their organization. The purpose of the league is to draft a bill, and to influence legislation to get the same passed and signed by the governor, that will debar from practice in Michigan all who attempt to go there to practice without due qualifications.

WHILE the great Chinese statesman, Li Hung Chang, was in Berlin recently, he took advantage of the opportunity and had the bullet which he carries in his cheek located by the Röntgen rays. It will be remembered that while in Japan, arranging treaty of peace between that country and his own, a would-be assassin shot him. The skiagraph shows the encysted missile in his cheek, slightly below the point of entrance.

DR. G. FRANK LYDSTON, of Chicago, is writing a book. This, of course, is nothing remarkable, for he has written a book before. But this is to be a book on everything but medicine, although religion is to be touched on very lightly. It is to be a book of 500 or 600 pages, and will contain humorous sketches, character studies, dialect stories, original verse, and sentiment. It will be profusely illustrated and the doctor says it will be the most talked of book of the century. "Uncle Tom's Cabin" will not be in it with "Over the Hookah," which is the euphonious title the book will bear. A small *edition de luxe* will be issued, on subscription, at $5 each. "Now is the time to subscribe."

NEW MEDICAL LAW IN OHIO.—This law was passed in February last and is now in effect. It provides for the appointment by the governor of seven physicians to act as a board of medical examiners and registration, to be selected from the different schools of medicine in the state in proportion to their number, but no school can have a majority on the board, so that it gives the regular school only three out of the seven. The board has the power to grant certificates to practice on examination. It grants licenses to midwives, but at the same time their duties are limited by law. In other words, they are not allowed to use forceps, practice version, or do any of the obstetric operations. The board is its own authority in regard to what shall constitute a medical college in good standing. Among other resolutions the board adopted at its organization was the following:

"*Resolved*, That all medical colleges of the

Digitized by Google

United States requiring a minimum of three years' study of medicine and two courses of lecture for graduation, prior to 1886, and possessing proper facilities for teaching and a faculty embracing the chairs of anatomy, physiology, chemistry, materia medica, therapeutics, medicine, surgery, and obstetrics shall be recognized as in good standing, and diplomas issued by the same and properly verified shall entitle the holders thereof to register as graduates in medicine under the laws of Ohio, providing that no certificate shall be issued to any applicant upon proof that his or her diploma has been obtained fraudulently, or in violation of the published rules of the college issuing same.

"*Resolved*, That for the ten years ending February 27, 1896, all medical colleges exacting the foregoing requirements, and possessing facilities and a faculty as specified in foregoing resolution, shall by virtue of such facts be recognized as in good standing to and including the year 1892, but that no medical college shall be recognized in good standing which has not since 1892 possessed the foregoing facilities and faculty, and which had not in addition exacted an entrance qualification and attendance upon three regular courses of lectures as a condition of graduation.

"*Resolved*, That on and after July 1, 1899, no medical college shall be recognized as in good standing which does not require the entrance qualification prescribed by the Association of American Medical Colleges as a prerequisite for matriculation; which does not possess an adequate equipment for teaching medicine; which has not clinical and hospital facilities, based upon a minimum municipal population of 50,000, and which does not have an active faculty embracing the departments of anatomy, physiology, chemistry, therapeutics, materia medica, medicine, obstetrics, histology, pathology, bacteriology, gynecology, laryngology, hygiene, state medicine, surgery, ophthalmology, and which does not enjoin attendance upon 30 per cent of four regular courses of instruction, of not less than twenty-six weeks each in four different years, and which does not exact an average grade of 75 per cent on examination as conditions of graduation; providing that the rule relative to population as a basis for clinical and hospital facilities shall apply to institutions under state control, receiving gratuitously patients from all parts of the state in which the colleges are located."

The last resolution indicates that the diploma mill is doomed even in Ohio.

A LADY from the far west, who had just been through a course of typhoid treatment, with enemata en masse, said, while speaking of her experience: "I don't know much about different kinds of doctoring, but I must say I prefer quartz to placer mining."

Correspondence.

GASTRIC ULCER.

HARTINGTON, NEB., June 16, 1896.

Editor Western Medical Review.—DEAR SIR: I was called to see Mrs. B., aged 30, April 13, married, three children. She had a sense of unusual fullness in the stomach, which was accompanied by a feeling of faintness. Nausea existed for a few moments and was followed by vomiting of partially coagulated blood of a bright red color. She was almost in total collapse after the hemorrhage. Her face assumed an earthy pallor, drawn and haggard. The pain was intense over the stomach and back and in the region of the ninth and tenth dorsal vertebra, especially on pressure. She also had pain in the right shoulder. She gave me a history of stomach trouble two years previous to this hemorrhage, and always suffered more or less with dyspepsia and constipation. After the hemorrhage she had diarrhea, the stools being of dark color of tarry consistency. The vomiting was continuous, every day and sometimes three or four times daily. It occurred when the pain was most severe and consisted of food of a strong acid reaction, and mingled with bile. Vomiting would temporarily relieve the pain. She had cardiac palpitation, which I attributed to anemia and gastric derangements. The impulse and sounds increased and diminished at the same time, and I could hear the reduplication of second sound. The palpitation came on suddenly and was not constant. At times the heart was absolutely normal. Her lungs were normal and previous history was good. Three weeks later she had uterine hemorrhage, which lasted five days, and she sank rapidly and died seven days later of peritonitis, due to perforation. I saw her in the evening and pronounced it peritonitis, due to perforation, and the next morning another doctor was called and gave the cause of her death as heart disease and consumption. Question: Was there anything about this case that would indicate heart disease or acute consumption? It was impossible to keep anything on her stomach; rejected everything; gave nourishment per rectum, and two grains of sulphite of soda three times raily, and morphine hypodermically to relieve pain, and tried almost every remedy in materia medica, but of no avail.

DR. F. P. DORSEY.

A HOT water bag over the cardiac region is an effective stimulant measure in threatened heart failure.

ONE of the best and most powerful intestinal antiseptics in the materia medica is sulpho-carbolate of zinc.

Digitized by Google

Society Proceedings.

NEBRASKA STATE MEDICAL SOCIETY.

Committees for Twenty-ninth Annual Session, to be Held in Lincoln, May 18, 19, and 20, 1897.

Dr. F. D. Haldeman, the president, has made the following selections for committees and chairmen of committees for the next session of the Nebraska State Medical Society:

COMMITTEES.

Arrangements—H. B. Lowry, M. H. Garten, A. R. Mitchell.

Credentials—Geo. H. Simmons, secretary, ex-officio chairman; First congressional district, J. R. Haggard, Lincoln; Second congressional district, B. B. Davis, Omaha; Third congressional district, H. G. Leisenring, Wayne; Fourth congressional district, G. W. Shidler, York; Fifth congressional district, Fred E. McKeeby, Red Cloud; Sixth congressional district, J. H. Miller, Gering.

Grievances—R. C. Moore, Omaha, W. A. Chapman, Hastings, and Claude Watson, Nebraska City.

Necrology—A. S. v. Mansfelde, Ashland, Charles Inches, Scribner, and E. M. Whitten, Nebraska City.

Auditing—M. H. Everett, Lincoln, E. L. Smith, Shelton, and J. H. East, Rising City.

CHAIRMEN OF SECTIONS.

Practice of Medicine—Wellington S. Gibbs, Omaha.

Surgery—Theo. P. Livingston, Plattsmouth.

Obstetrics—Victor H. Coffman, Omaha.

Gynecology—Ewing Brown, Omaha.

Nervous and Mental Diseases—C. E. Coffin, Asylum.

Anatomy and Physiology—W. H. Parkhurst, Dunbar.

Ophthalmology and Otology—W. L. Dayton, Lincoln.

Materia Medica and Therapeutics—W. F. Milroy, Omaha.

Medical Jurisprudence, Medical Chemistry and Toxicology—F. A. Long, Madison.

Pathology and Histology—A. D. Wilkinson, Lincoln.

Public Hygiene and Medical Legislation—W. R. Lavender, Omaha.

Dermatology—W. N. Hunt, Central City.

Laryngology—F. S. Owen, Omaha.

Each chairman is expected to select two associates for discussion.

SECOND PAN-AMERICAN MEDICAL CONGRESS.

Dr. D. C. Bryant, of Omaha, has been appointed vice president for Nebraska of the above society, which meets in the City of Mexico on the 16th, 17th, 18th, and 19th of November, 1896. Dr. Bryant is anxious to have as many as possible go from Nebraska, and he desires all who intend going to notify him as soon as possible. Greatly reduced rates are promised and this will be a magnificent opportunity to visit our southern neighbor. The following is selected from the circular giving regulations, etc.:

Members of the congress shall consist of such members of the medical profession of the Western Hemisphere, including the West Indies and Hawaii, as shall comply with the special regulations regarding registration, or who shall render service to the congress in the capacity of foreign officers.

The following shall be considered as the constituent countries of the Pan-American Medical Congress: Argentine Republic, Bolivia, Brazil, British North America, British West Indies (including British Honduras), Chile, Dominican Republic, Honduras (Sp.), Mexico, Nicaragua, Paraguay, Peru, Salvador, Republic of Colombia, Republics of Costa Rica, Ecuador, Guatemala, Haiti, Kingdom of Hawaii, Spanish West Indies, United States, Uruguay, Venezuela, Danish, Dutch, and French West Indies.

The sections of the congress shall be as follows: (1) General medicine, (2) general surgery, (3) military medicine and surgery, (4) obstetrics, (5) gynecology and abdominal surgery, (6) therapeutics, (7) anatomy, (8) physiology, (9) diseases of children, (10) pathology, (11) ophthalmology, (12) laryngology and rhinology, (13) otology, (14) dermatology and syphilography, (15) general hygiene and demography, (16) marine hygiene and quarantine, (17) orthopedic surgery, (18) diseases of the mind and nervous system, (19) oral and dental surgery, (20) medical pedagogics, (21) medical jurisprudence, (22) railway surgery.

The languages of the congress shall be Spanish, French, Portuguese, and English.

In order to be properly enrolled, each member of the congress will pay to the treasurer thereof, in the City of Mexico, the sum of $5 in gold.

There will be one opening session, one closing, and one intermediate session of a purely scientific character.

The opening session, which will be of a solemn character and presided over by the supreme authority of the nation, besides being attended by the members of the congress, will also be attended by the members of scientific societies and other distinguished persons who may be invited.

No discussions will be held in the general sessions.

Sessions of the sections will be held from 9 to 12 A. M. and from 3 to 5 P. M., in the places that may be designated by the organizing committee. They shall be presided over by the president of each section, alternating with the vice-presidents of each one of the nations that are represented in the respective sections.

Digitized by Google

All papers will be presented in writing.

Each author will forward to the secretary of the organizing committee in the City of Mexico, and before the 1st day of August of the present year, an extract, not exceeding 300 words, of the paper to be presented by him. These extracts will be printed in English, French, and Spanish, and will be distributed to the members of the congress, before the session in which they are to be read. No paper will be announced which is not accompanied by this extract; but the authors who comply with these conditions will have a right to have their work published intact in the transactions of the congress.

The reading of the papers in the sessions must not last more than twenty minutes; when the papers are so long that they cannot be read within that time, the authors will give extracts from them, either in writing or by speech; but they will be published intact in the transactions of the congress and in the language in which they have been written.

The members of the congress who may take part in the discussions in any section will present their speeches in writing at the termination of the sessions, to the respective secretaries of such sections, and they will also be published in the transactions.

The papers which have been announced for reading in the order of the day, in each section, will serve as subjects for discussion. In such discussions no speaker will be allowed to speak more than once, and for five minutes; but the author of the paper under discussion will be allowed to reply, if he considers it necessary, in one sole speech, which will not go beyond ten minutes.

Mississippi Valley Medical Association.—A meeting of the executive committee of the Mississippi Valley Medical Association was held at Atlanta on May 6, and the following gentlemen were appointed to deliver addresses: Dr. H. N. Moyer, Chicago, address on medicine; Dr. Horace H. Grant, Louisville, address on surgery. The indications are that the meeting to be held at St. Paul on October 20, 21, 22, and 23 will be the largest and most successful in the history of the association. As all the railroads will offer reduced rates for the round trip, an opportunity will be given to visit St. Paul and Minnesota during the most delightful season of the year. C. A. Wheaton, M. D., St. Paul, Minn., chairman committee of arrangements; H. O. Walker, M. D., Detroit, Mich., president; H. W. Loeb, 3559 Olive street, St. Louis, secretary.

Cedar County Medical Society.—Quite a number of physicians of Cedar county, Neb., met in the office of Dr. M. M. Wilson, of Hartington, on Thursday, July 9th, and organized the above society. The following officers were elected: President, Dr. M. M. Wilson, Hartington; first vice president, Dr. A. F. Miller, Randolph; second vice president, Dr. Hamilton, Coleridge; secretary, Dr. L. J. Townsend, Laurel; treasurer, Dr. J. A. Dales, Randolph. The next meeting of the society, for the adoption of the constitution and by-laws, will be held at Coleridge, subject to the call of the president. The regular meetings will be held the second Tuesday of January, April, July, and October. We wish the new society abundant success, and hope to hear of other counties which have not already a society doing likewise.

The American Association of Obstetricians and Gynecologists will hold its ninth annual meeting in the Hotel Jefferson, at Richmond, Va., Tuesday, Wednesday, and Thursday, September 22, 23, and 24, 1896, under the presidency of Dr. Joseph Price, of Philadelphia. The meeting promises to be a most interesting one. Mr. Lawson Tait, of Birmingham, Eng., has announced his intention to be present and participate in the proceedings. Other distinguished fellows and guests will also attend. Dr. George Ben Johnston, of Richmond, is chairman of the committee on arrangements, who will secure hotel accommodations for the fellows and their guests on application.

North Missouri Medical Association.—The North Missouri Medical Association, at its recent meeting, held at Moberly, Mo., elected the following officers: C. A. Jennings, president; W. MacAllister, first vice president; J. D. Brummel, second vice president; Robert Haley, treasurer; George N. Lance, recording secretary; G. O. Cupaidge, corresponding secretary. Executive committee, J. H. P. Baker, W. T. Lindley, C. B. Clapp, D. R. Stratton. The next meeting will be held in Moberly, in June, 1897.

The Ohio State Medical Society.—The officers for the year 1896-'97 are: President, Dr. F. C. Larimore, of Mt. Vernon; vice presidents, Dr. M. Stamm, of Fremont, Dr. C. F. Clark, of Columbus, Dr. John S. Beck, of Dayton, and Dr. George W. Crile, of Cleveland; secretary, Dr. Thomas Hubbard, of Toledo; assistant secretary, Dr. H. M. W. Moore, of Columbus; treasurer, Dr. James A. Duncan, of Toledo. The next meeting will be held in Cleveland, on May 19, 20, and 21, 1897.

The American Microscopical Society will hold its next annual meeting in the Carnegie library building, Pittsburg, August 18 to 21. Applications for membership and titles of papers to be read should be addressed to A. Clifford Mercer, M. D., president, Syracuse, N. Y., or William C. Krauss, secretary, Buffalo, N. Y.

At its meeting held in Minneapolis, June 17 to 19, the Minnesota State Medical Society adopted strong resolutions against the proposed legisla-

Digitized by Google

tion prohibiting vivisection. The next meeting will be held at Mankato, Minn. The president is Dr. W. D. Flynn, of Redwood Falls, and the secretary, Dr. Ignatius Donnelly, St. Paul.

THE Central Iowa Medical Association held its annual meeting in Boone, June 19. The officers for the ensuing year are: A. A. Deering, Boone, president; F. E. Whitley, Webster City, vice president; G. H. Stanges, Boone, secretary and treasurer. Ames was selected as the place for holding the next meeting.

THE Colorado State Medical Society held its annual session at Denver, June 16, 17, and 18. The officers for the ensuing year are as follows: Dr. R. B. Levy, president; Dr. H. R. Whitney, corresponding secretary; Dr. Laura Liebhardt, recording secretary.

AT the annual meeting of the Washington State Medical Society, held in Tacoma, May 19 and 20, Dr. R. S. Thompson, of Spokane, was elected president, and Dr. J. M. Semple, of Medical Lake, secretary. The next meeting will be held in Spokane, May, 1897.

Proceedings of the Nebraska State Board of Health.

MEMBERS—Dr. J. V. Beghtol, Friend, President; Dr. C. F. Stewart, Auburn, Vice-Pres.; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.
Board meets first Thursday of each month at the state capitol, Lincoln.

The Nebraska State Board of Health, at its meeting held July 2d, granted certificates to the following:

W. F. Stouder (P. M.), Arapahoe,
Physio-Medical College, Indianapolis, May, 1889.

Chas. H. McDowell (H.), Omaha,
Hahnemann Medical College, Philadelphia, April, 1892.

Chas. D. Chandler (H.), Lincoln,
Hahnemann Medical College, Philadelphia, May, 1896.

Geo. R. Gilbert (R.), Omaha,
Omaha Medical College, April, 1896.

Chas. C. Crawl (R.), Randolph,
Omaha Medical College, April, 1896.

S. J. Randall (H.), Nebraska City,
Pulte Medical College, Cincinnati, March, 1880.

Chas. W. Gooden (R.), Aurora,
Medical College of Indiana, May, 1896.

Augustus Hamilton (R.), Coleridge,
Rush Medical College, May, 1896.

J. S. Melvin (R.), Nemaha,
Creighton Medical College, April, 1896.

John O. Chambers (R.), Lanham,
Louisville Medical College, February, 1891.

No applicant rejected.

Miscellaneous.

SUMMARY OF THE ANTITOXIN REPORT OF THE AMERICAN PEDIATRIC SOCIETY.

SUMMARY.

1. The report includes returns from 615 physicians. Of this number more than 600 have pronounced themselves as strongly in favor of the serum treatment, the great majority being enthusiastic in its advocacy.

2. The cases included have been drawn from localities widely separated from each other, so that any peculiarity of local conditions to which might be ascribed the favorable reports must be excluded.

3. The report includes the record of every case returned except those in which the evidence of diphtheria was clearly questionable. It will be noted that doubtful cases which recovered have been excluded, while doubtful cases which were fatal have been included.

4. No new cases of sudden death immediately after injection have been returned.

5. The number of cases injected reasonably early in which the serum appeared not to influence the progress of the disease was but nineteen, these being made up of nine cases of somewhat doubtful diagnosis; four cases of diphtheria complicating measles, and three malignant cases in which the process was so rapid that the cases had passed beyond any reasonable prospect of recovery before the serum was used. In two of these the serum was of uncertain strength and of doubtful value.

6. The number of cases in which the patients appeared to have been made worse by serum were three, and among these there is only one new case in which the result may fairly be attributed to the injection.

7. The general mortality in the 5,794 cases reported was 12.3 per cent; excluding the cases moribund at the time of injection or dying within twenty-four hours, it was 8.8 per cent.

8. The most striking improvement was seen in the cases injected during the first three days. Of 4,120 such cases the mortality was 7.3 per cent; excluding the cases moribund at the time of the injection or dying within twenty-four hours, it was 4.8 per cent.

9. The mortality of 1,448 cases injected on or after the fourth day was 27 per cent.

10. The most convincing argument, and, to the minds of the committee, an absolutely unanswerable one, in favor of serum therapy is found in the results obtained in the 1,256 laryngeal cases (membranous croup). In one-half of these recovery took place without operation, in a large proportion of which the symptoms of stenosis were severe. Of the 533 cases in which intubation was performed the mortality was 25.9 per cent, or less

Digitized by Google

than half as great as has ever been reported by any other method of treatment.

11. The proportion of cases of broncho-pneumonia—5.9 per cent— is very small and in striking contrast to results published from hospital sources.

12. As against the two or three instances in which the serum is believed to have acted unfavorably upon the heart, might be cited a large number in which there was a distinct improvement in the heart's action after the serum was injected.

13. There is very little, if any, evidence to show that nephritis was caused in any case by the injection of serum. The number of cases of genuine nephritis is remarkably small, the deaths from that source numbering but fifteen.

14. The effect of the serum on the nervous system is less marked than upon any other part of the body; paralytic sequelæ being recorded in 9.7 per cent of the cases, the reports going to show that the protection afforded by the serum is not great unless injections are made very early.

The committee feels that this has been such a responsible task that it has thought best to state the principle which has guided it in making up the returns. While it has endeavored to present the favorable results with judicial fairness, it has also tried to give equal or even greater prominence to cases unfavorable to antitoxin.

In conclusion, the committee desires, in behalf of the society, to express its thanks to members of the profession who have co-operated so actively in this investigation, and to Dr. A. R. Guerard for the preparation of the statistical tables.

[Signed.] L. Emmett Holt, M. D.,
W. P. Northrup, M. D.,
Joseph O'Dwyer, M. D.,
Samuel S. Adams, M. D.,
Committee.

THE ACTION OF THE SOCIETY UPON THE REPORT.

At the close of its presentation, the society voted to accept the report of the committee, and after a full discussion it was decided to embody its conclusions in the following resolutions:

(1.) *Dosage.*—For a child over two years old, the dosage of antitoxin should be, in all laryngeal cases with stenosis, and in all other severe cases, 1,500 to 2,000 units for the first injection, to be repeated in from eighteen to twenty-four hours if there is no improvement; a third dose after a similar interval if necessary. For severe cases in children under two years, and for mild cases over that age, the initial dose should be 1,000 units, to be repeated as above if necessary; a second dose is not usually required. The doses should always be estimated in antitoxin units, and not of the amount of serum.

(2.) *Quality of Antitoxin.*—The most concentrated strength of an absolutely reliable preparation.

(3.) *Time of Administration.*—Antitoxin should be administered as early as possible on a clinical diagnosis, not waiting for a bacteriological culture. However late the first observation is made, an injection should be given unless the progress of the case is favorable and satisfactory.

The committee was appointed to continue its work for another year, and was requested to issue another circular asking for the further co-operation of the profession, this circular to be sent out as soon as possible, in order that physicians may record their cases as they occur through the coming year.

Rational Treatment of Abortion.—Dr. Benicke recently published a comprehensive paper on this subject, based on a large number of personal observations. He claims very good results from the treatment, which is strictly in accordance with modern views of asepsis. He believes in being "meddlesome" at the proper time. We append a resume of his conclusions, taken from the *Allgemeine Medicinische Central Zeitung*, December 21, 1895.

1. In cases of severe hemorrhage and febrile disturbances occurring in the first two months the entire contents of the uterus should be removed. The finger or the curette may be used for this purpose. The calibre of the cervix will determine the choice of method.

2. In the third month, if the os uteri is not patent, tampons are at first employed. Anesthesia is necessary for the radical removal of the product of conception. The placenta may have to be removed by means of the curette. The fetus can generally be best taken away by slowly introducing the finger and using that alone.

3. In the fourth month the fetus must be removed without the aid of the curette, although remnants of placental structure and membranes may call for the use of that instrument.

4. Even after spontaneous abortion, the uterine cavity is to be explored and all remnants promptly removed by means of the curette.

5. Only very free hemorrhage calls for the employment of tampons.

These views are not particularly novel, nor very radical, but they bear examination as embodying the results of large and conservative practice by a modern accoucheur.—*Medical Record.*

The application of a cold water compress, covered with a bandage of flannel, has proven efficacious in the night sweats of phthisis after the usual remedies had failed.

One per cent of common baking soda put into the water in which instruments are boiled, in order to sterilize them, will, to a great extent, if not totally, prevent rusting.

Digitized by Google

THE VALUE OF THE PULMONIC SECOND SOUND.*

BY J. N. HALL, M. D.,

PROFESSOR OF THERAPEUTICS AND CLINICAL MEDICINE, UNIVERSITY OF COLORADO, DENVER, COLO.

My object in presenting this paper is to call attention to a well-known but much neglected subject, the investigation, in diseases of the chest especially, of the character of the second sound at the orifice of the pulmonary artery. It appears to me that many physicians, although gauging quite accurately the tension in the systemic circulation, by means of the pulse and the character of the aortic second sound, pass over as almost unworthy of notice the examination of the pulmonic area. And yet, in a few seconds, with the stethoscope, as much may be learned of the conditions of the circulation in the lungs as has been learned, at the aortic area, of the systemic circulation.

In diseases of the mitral valve, whether obstructive or regurgitant, all authorities agree as to the importance of the accentuation of the pulmonic second sound, in deciding as to the degree of obstruction in the pulmonary vessels. One may probably, with safety, go even further than most authors go, in the case of an apical systolic murmur, which has existed for some time, and say, given such a murmur, not transmitted greatly to the left, without enlargement of the cardiac area, and without accentuation of the pulmonic second sound, that probably no serious change has taken place in the valve. In other words, it is a crucial test when one is in doubt as to the character of an apical systolic murmur, and, I believe, not appreciated at its full value.

This sound is equally available in case of a mitral obstructive lesion in forming a correct judgment as to the degree of obstruction, and the degree of compensation as well. In case of doubt as to whether a presystolic murmur at the apex were due to mitral obstruction or to aortic regurgitation (Flint's murmur), the absence of marked accentuation of the pulmonic second sound would weigh decidedly in favor of the integrity of the mitral valve, although I have not found this point mentioned in any of the treatises upon this subject.

In chronic disease of the chest, of whatever nature, a marked accentuation of the second sound at the pulmonic orifice is of grave prognostic import, indicating a decided obstruction to the circulation in the vessels involved, although indicating as well an hypertrophy of the right ventricle to meet the increased demand. Whether the obstruction be from the destruction of capillaries in emphysema, the contraction of the interstitial tissue in fibroid phthisis, or the combination of destruction of tissue, infiltration of the new products, and possibly other processes in ordinary tuberculosis, it indicates trouble.

A knowledge of the value of this sign may at times save one from serious error, as in the following case, seen in consultation some years since: A girl, six years of age, had presented for five days all the rational signs of acute lobar pneumonia, but the attending physician had been unable, after repeated examinations, to locate the disease. Finally, fearing that some other trouble was setting in, he asked me to see the case with him.

After hearing the history, I confidently expected to find the signs of pneumonia in the left chest, and was surprised to find the fronts entirely normal, so far as I could determine. Because of the child's weakness, it was proposed to me that the examination of the back be omitted, but, having noted a decided accentuation of the pulmonic second sound, and called the attending physician's attention to it, I insisted upon the complete examination, confident that anything of sufficient gravity to cause a decided increase in the tension in the pulmonic artery must be discoverable upon careful examination. The back was found normal, however, with the exception of an area two inches in diameter near the lower angle of the left scapula; here very moderate dullness existed, but the ausculatory signs were marked, namely, bronchial respiration, bronchophony, and moist rales. It was evidently an acute pneumonia which approached the surface of the lung only at this point, and, to one not fairly expert in physical diagnosis, not easy to discover. I admit, of course, that no physician should overlook such signs, but they were overlooked by the attendant in this case, and by a previous consultant. If the two had appreciated the meaning of the decided accentuation of the sound in question, they would probably have been led to make a successful search for the cause of it.

Other instances of somewhat similar nature might be quoted, but this will suffice for illustration.

I believe that most of the present generation of physicians in active practice were taught that the murmurs at the pulmonic orifice were not only rare, but of comparatively little importance. The effect of this teaching has been to lead many of us to entirely neglect all sounds at this orifice in ordinary examinations, for I have often seen its area passed by without so much as the touch of the stethoscope. Inasmuch as a proper idea of the amount of obstruction in the pulmonic circuit in pneumonia, and hence of the amount of work called for from the right ventricle—a most important factor in prognosis and in deciding upon the advisability of administering cardiac stimulants—cannot be obtained without an examination of the sound in question; nor a correct judgment be formed, in a case of chronic bronchitis, as to whether there is beginning obstruction, and

* Read in the Section on Practice of Medicine at the Forty-seventh Annual Meeting of the American Medical Association, at Atlanta, Ga., May 5-8, 1896.

Digitized by Google

consequent hypertrophy of the right heart, from emphysema which has not yet developed sufficiently to be patent to percussion, it would seem to be proven, when the evidence we have heretofore adduced is considered, that this sound should be investigated in every day practice exactly as other accessible chest sounds are, the ease with which such examination can be made being a powerful recommendation of the procedure.—*Journal of the American Medical Association*, June 27th.

Appendicitis.—While not thoroughly appropriate for a popular health journal, yet appendicitis has become such a popular disease, and occupies the public mind to such an extent, that a few words may not be out of place.

We are impelled to write these words because we are compelled to believe that the dogmatic, assertive teaching of many surgeons that there is no such thing as a medical treatment of appendicitis, and that all cases call for immediate operative interference, is a dangerous damaging doctrine, that should not go unchallenged.

The brickmaker would like to see every house in the land built of brick; while the lumber dealer is honestly satisfied that wood is decidedly preferable. He who makes terra-cotta pipes believes that they are good sewers, while he who deals in iron conduits is convinced that terra-cotta is no good.

We are all swayed, more or less, by prejudice, and prejudice always sways us to the side of self-interest; this is not intended as a reflection upon any one or any class, it is merely a statement of a physiological fact, that one's judgment is generally prejudiced towards one's own interests; not always, but most always.

Of course it is to the interest of the surgeon to have all cases of appendicitis operated upon, and he honestly and sincerely argues that his stand is not inimical to the interests of the attending physician, the number of whose professional visits will be, most likely, just as great with as without an operation; hence he can see no reason why he should not be called in to operate, and, seeing no reason against it, he honestly and logically concludes that the operative treatment of appendicitis is the only treatment worthy of consideration.

In some cases he is correct, but that appendicitis cannot be cured except by operation is ridiculous, unscientific, and incorrect, and it will not be claimed by any careful, conservative physician. There is a medical treatment of appendicitis, and many cases, yes, very many, have been cured thereby; we have cured them ourselves, and so have many other physicians.

We would warn our readers against the man who dogmatically contends that nothing but operative interference will cure this disease.

The rational, conservative plan is to undergo, patiently and perseveringly, an intelligent course of medical treatment, and, if this fails, then to carefully consider the advisability of operation.—*Annals of Hygiene.*

The Cause of Death in Serum Injections.—Adamkiewicz (*Wien. Med. Presse*) discusses the possible reasons of the fatal issue in a recent case at Berlin. Langerhans attributed the death to the poisonous action of the antitoxin upon a healthy subject when unneutralized by a pre-existent toxin. This seems *a priori* improbable, considering the large number of cases of suspected diphtheria which have been treated by antitoxin without ill effects, and in which the suspicion has been proved unfounded. Nor does the evidence show that the injection of serum into a vein is in all cases *per se* an element of danger, since the blood is able to tolerate the introduction of considerable quantities of indifferent substances with impunity. That the fatality was due to the amount of carbolic acid in the injection is not in accordance with the known effects of that substance, and the death was far too sudden to have resulted from poisoning by the serum itself, serum intoxication having been shown by Eulenburg to be always a more or less chronic process. The entrance of serum into a vein and its employment in too concentrated a form having also been excluded, one is compelled to seek another cause for the intensification of its action in this case. This Adamkiewicz finds in a disturbance of the adaptive mechanism of the organism. The living body is provided with a self-regulating apparatus, which protects it against noxious influences within certain limits; once these are past, the animal is lost. In his recent experiments with "cancroin" he found that several patients showed, without apparent reason, alarming signs of collapse after injection, and, by careful exclusion, was forced to conclude that the cause was sudden passage beyond the bounds of the regulating mechanism. This was confirmed by the discovery that no such effects resulted when the injection was gradually given, so as to allow the organism time for adaptation; in consequence of this Adamkiewicz now injects "cancroin" in tenths of a cubic centimeter, allowing some seconds after each injection for the self-regulating mechanism to act. He further extended his experiments to the injection of atmospheric air into the veins of the guinea-pig, and found that a considerable quantity could be taken up and eliminated without danger if it were given in small doses; thus 10 c.cm. injected in this way produced no ill effects, while 2 c.cm. were instantly fatal when injected at once and forcibly. Any substance, serum included, may have a double noxious action when introduced into the body, proportional to, first, the force with which it is injected; and, secondly, the specificity with which it acts on the blood, or,

Digitized by Google

through the blood, on other constituents of the body. The virulence increases with the force of injection, and this may well account for the death under consideration.—*British Medical Journal.*

LIABILITY TO PROSECUTION FOR DAMAGES IN ABDOMINAL SURGERY.—Dr. Cyrus A. Kirkley, of Toledo, read a paper with this title before the American Gynecological Society, New York, May 28. He said that the average juryman looked upon the medical expert as a witness having a bias for the side calling him. After setting forth the reasons for a reform in the matter of medical expert testimony, he commended the plan adopted in England of having all the medical witnesses of both sides confer together before giving their testimony, and suggested that if the court were to appoint a medical commission to hear and pass upon the medical points involved, some of the present abuses would be avoided. He also quoted a legal opinion to the effect that a surgeon, operating in an emergency by abdominal section upon a patient who had no chance for life without such operation, should not be liable in damages if this view of the urgency of the case were concurred in by other well-qualified practitioners.

Dr. Kelly suggested the observance of the following rules to minimize as far as possible the liability of the surgeon to prosecution: (1) Keep a written record of the cases and of the visits made; (2) make careful notes, as far as possible in the patient's own language, of the symptoms complained of and also of the results of the first examination; (3) a note should be made of the proposed line of treatment and of what was promised the patient; (4) never promise more than the actual mechanical result of the operation; (5) state frankly the risks of the operation; (6) keep careful records of the convalescence.

Dr. Edward P. Davis, of Philadelphia, said that a suit might arise in obstetrical practice, after a normal parturition, from the fact of a sudden rupture of an ovarian cyst, and death from sepsis, two or three weeks after confinement. It was already the practice in Pennsylvania in civil suits for a physician to be selected by each side.

SERUM TREATMENT OF MALIGNANT TUMORS.—In the *Province Medicale* for May 23d there is a long and interesting article on experiments carried out by M. S. Arloing and M. J. Courmont. The authors deal with the effects of the injections of the juice of epithelioma or of sarcoma into the ass, with the action of the normal serum on malignant tumors, and with that of the serum of asses which have been inoculated with epithelioma juice. They also give a detailed account of their most important observations and the conclusions drawn therefrom, which are as follows: (1.) Injections of the serum of asses which have been inoculated with epithelioma juice given in the region of malignant tumors are not alone capable of causing the disappearance of these tumors, or even of preventing the generalization and the fatal issue of the disease. (2.) These injections may be useful in bringing about a diminution in the size of the tumor for a short time, probably by a retrogression of the peripheral inflammatory zone. This action may be the origin of a temporary cure, if not of a definitive one, by making it possible to operate on a tumor which has been declared "inoperable" before the injections. More frequently it causes the disappearance, for a short time, of the symptoms of compression, such as pain and œdema. The general evolution of the disease will sometimes be arrested for several weeks. (3) Ass' serum thus prepared appears to contain toxic substances which do not exist in the normal serum. These substances accumulate in the organism, so that at a given moment they cause symptoms of reaction (in the cancerous, at least), such as œdema, purpura, various eruptions, etc., near the punctures, or even at a distance. These symptoms appear after the fifth injection, and they disappear at the end of a few hours or of a few days. They are frequently accompanied by general symptoms, such as a rise in temperature, anorexia, insomnia, etc. At the fifteenth injection the patients refuse to have the treatment continued. (4.) With the normal serum of the ass, the same diminution in the size of the tumors is obtained, but the reactional symptoms which follow the injections of the "immunized" serum are never observed. (5.) Subcutaneous injections of serum may be given in the region of "inoperable" tumors if, by so doing, it makes an operation possible by freeing the neighboring parts, or when the tumors are accompanied by pain or œdema due to compression. The normal serum of the ass is preferable to the "immunized" serum.—*Medical News*, June 13.

ANOTHER SUBSTITUTE FOR MURPHY'S BUTTON.—Dr. J. J. Johnson, of New York, in the *Louisville Medical Journal*, brings to the notice of the profession another substitute for Murphy's button. He employs a cylinder made out of a carrot, parsnip butt, or potato, or, in fact, any vegetable root, one and a half to two inches long, with a diameter corresponding to the calibre of the gut to be repaired. The ends of the cylinder are passed into the ends of the severed gut so as to invaginate the bowel sufficiently for the peritoneal surfaces to come in apposition.

The cylinder now being in position, the needle is passed through the serous coat at the mesenteric junction, and with a continuous Lembert stitch the two ends are securely sewed together all the way round. The cylinder in due time partially digests and passes out. About three minutes' time is all that is required to place in the cylinder and do the stitching.

Digitized by Google

Chloroform to Prevent Perineal Lacerations.—It has been the experience of those connected with the obstetric clinic that in quite a number of cases laceration of the vagina and perineum may be avoided by a little patience on the part of the obstetrician and the judicious use of chloroform. This is particularly the case in primaparæ. The fetal head, covered and generally preceded by the bag of water, makes an extremely good dilator, and ample time should be allowed for it in its passage through the soft parts. The patient can be easily controlled by having her lie on her side, with her back toward the physician, while he makes gentle manipulation of the perineum in order to increase its distensibility. So long as the patient is making ordinary bearing-down efforts, and the head is felt to advance slowly with each pain and recede slightly or remain quiescent in the intermission, no anesthetic is required, but if the head continues to steadily advance without any period of rest, or if, after a short, quick advance, the patient makes a great outcry of pain, chloroform or ether should be given. The anesthetic has a double effect—of stopping the advancing presenting part and giving the soft parts time to dilate. Chloroform has a more relaxing effect than ether on the tissues of the vagina and perineum and is less of a uterine stimulant; it is also more easily controlled, and by it the pain sense is diminished to a greater degree without the production of unconsciousness.—*Philadelphia Polyclinic.*

Summary of Serum Therapy.—The following is a summary of an interesting discussion by Schaefer (*Arch. Gen. de Med.*) of the present state of serum therapy as regards practical results:

1. *Tuberculosis.*—Treated with serum obtained from refractory animals by Richet and Hericourt without definite results up to the present time.

2. *Rabies.*—Immunization by vaccination gives better results than serum treatment.

3. *Pneumonia.*—Serum from immunized rabbits is difficult to obtain, consequently this treatment has not been used to any great extent. The subject is promising enough to deserve further investigation.

4. *Enteric Fever.*—Good results have not been obtained in practice, though laboratory experiments are very promising. This may be due to mixed infections or to the length of time between the penetration of poison and the treatment.

5. *Typhus Fever.*—Legrain, during an epidemic in Algeria, used the serum from patients who had suffered from this disease, with good results.

6. *Cholera.*—Cholera in man is different from that in animals. Nothing definite is known as yet, but Behring announces that he has a curative serum. His researches are not yet published.

7. *Syphilis.*—Sometimes good results have been effected with the serum from dogs and lambs.

8. *Streptococcus Infection.*—The serum from animals immunized by vaccination has been employed with good effect in angina, erysipelas, and puerperal fever.

9. *Cancer.*—There are no satisfactory results so far.

10. *Tetanus.*—This affection is very hard to cure in animals, and no conclusive results have been obtained in man. The serum, however, acts as a prophylactic agent against tetanus.

11. *Diphtheria.*—Here it is that the serum treatment has scored its most remarkable triumph. The few accidents that have occurred may be overlooked when we consider the wonderful success that has been attained. Serum treatment has also proved useful in snake bites, and it may have a brilliant future.

Medical Nomenclature.—In an editorial in the June number of the *Archives of Pædiatrics* the writer remarks that if Shakespeare had been a doctor of medicine in active practice, he would never have asked, "What's in a name?" He would have known that gastrodynia was far more impressive than simple colic, and that any person would suffer from scabies with greater equanimity than from itch. He would have known that German measles was the worst possible name that could be applied to a disease which is not measles and has no relationship to it. The worst error in nomenclature for the practitioner is the application to a simple disease of the name of a more serious disease with a modifying adjective. The noun is sure to be remembered, the adjective is soon forgotten. Tell a mother that her child has German measles, explain it ever so carefully, and she will be sure to remember the measles and promptly forget the German. Her children will be among those who have two attacks of measles, and some doctor in the future will be misled and diagnosis will be rendered difficult. We have no plan for correcting the evil, however, the writer continues. Words become fixed in their use and it is difficult to change them. Unfortunately, in this instance, there is no common word which can be used. Rubella means nothing to the average layman, scarlatina is a rank misnomer, roseola is but little better, and the average doctor does not know how to pronounce Rötheln.—*New York Medical Journal*, June 20.

Hard Luck!—The conversation had turned on appendicitis, and a gentleman remarked that Mr. Johnson had had his vermiform appendix removed. A deafish old lady present pricked up her ears at this, and asked, "What was that you said?" Raising his voice, the gentleman answered, "I said that Mr. Johnson had his vermiform appendix removed." Very sympathetically, and in loud tones, the old lady replied, "Oh, what a pity; and he wanted children so badly, too!"

Digitized by Google

A PRACTICAL TEST FOR ALBUMIN.—Although a number of exact methods for the examination of urine, to determine the presence of albumin, have been known for years, for practical purposes it is important to use that method which will combine accuracy with ease and rapidity at the sick-bed. Ott knows of no reagent which fulfills this purpose better than sulphosalicylic acid. This will at once show the presence of the smallest amount of albumin in the urine, by causing a cloudiness when added to the urine in which albumin is present. The sulphosalicylic acid may be added either in 30 per cent solution or in substance, as the crystals dissolve rapidly in the urine; the reagent can therefore be easily carried in the pocket. All that is necessary for an examination at the house of the patient is a test tube and a bottle containing sulphosalicylic in substance, as this agent is hygroscopic. A glass-stoppered bottle is desirable. To examine the urine filtered a small glass funnel and filtering paper are necessary, all of which can be easily put in a small portable wooden box and carried in the pocket. Another reagent, which, though not as convenient, is recommended by Spiegler. It consists of

Mercury bichloride..... ...	8 gme.
Tartaric acid....	4 gme.
Water, distilled..... ..	200 gme.
Glycerine, pure..... ..	20 gme.

Of this solution a small quantity up to 1 to 2 ctm. is poured into the test tube, and the urine, which has been made slightly acid with concentrated acetic acid, is added to it. This is an extremely sensitive reagent, which will show traces of albumin when none of the well-known methods will do so, being almost superior to the sulphosalicylic acid reaction in this respect.—*American Medico-Surgical Bulletin.*

THE DEATH OF DR. LANGERHAUS' SON EXPLAINED.—A full and satisfactory explanation of the sudden and tragic death of the little son of Dr. Langerhaus, immediately following an injection of antitoxin serum, has been reached through the subsequent investigation. In the first place, the analysis of the serum proved it to be reliable, and no irregularity in the method of its administration could be discovered. It was found, however, that the child had just completed an unusually heavy meal, and as the necropsy showed his larynx and trachea well filled with a material identical with that found in his stomach, the accepted inference is that while faint from the shock of the injection, he was unable to eject the vomited matter from his throat, and instead drew it into the air passages, with fatal effect. It may be concluded, then, that what appeared to be quite damaging evidence against the serum is really the result of a very simple accident.—*Medical News.*

A NEW HYPNOTIC.—From a species of cactus, known to the Mexicans as "pellote," Dr. Hefter, of Leipzig, has separated the active principle, which he has named pellotin. Professor Jolly, of Berlin, has made a number of experiments with it upon patients in Charité Hospital, Berlin, following those previously made by Dr. Hefter upon animals and himself. He found that three-quarters of a grain would almost always cause several hours of sleep, and that no subjective symptoms followed its use beyond a little giddiness in about 20 per cent of the patients. He observed, however, a marked influence upon the pulse rate, which was ten to twenty beats lower during sleep, but returned to normal on waking. It is estimated that half a grain is equivalent to fifteen grains of trional or thirty grains of chloral hydrate. The alkaloid is quite insoluble, hence the hydrochlorate is always employed.—*Medical News.*

Young Mother—What ought the baby's food to be, Dr. Chargem?

Doctor—Nothing but the milk from one cow.

Young Mother—And I believe you said the mother ought to take four or five fresh eggs every day?

Doctor—Yes.

Young Mother—Well, doctor, should they be eggs from one hen?

Necrology.

DR. B. G. CULVER died at Kane, Mo., May 28, aged 65.

DR. ASA HOWE died at Fairfield, Iowa, June 5th, aged 78.

DR. DAVID C. CHAMBERLAIN died at Detroit, June 4, aged 81.

JOHN MCLEAN FLEMMING (Rush, 1872) died in Chicago, June 10, aged 50.

DR. J. W. PHIPPS (Rush, 1850) died at Evansville, Indiana, June 8th, aged 79.

DR. GEORGE H. CALKINS died at Waupaca, Wisconsin, June 25th, aged 66 years.

J. F. POTTS, M. D., died of consumption at Detroit, Michigan, June 8th, aged 59.

DR. J. N. LEDLIE died suddenly at Pittsfield, Illinois, May 22d. His body was cremated in St. Louis.

WALTER FISHER, M. D., assistant surgeon and captain, U. S. A., died at Fort Meade, South Dakota, June 8.

SIR J. RUSSELL REYNOLDS, president of the British Medical Association, died May 22, aged 68. He was made a baronet in 1895. As a physician

Digitized by Google

he attained the highest success, and as a teacher he was without a peer. No physician of London was better known or more highly respected by his fellows.

CHAS. M. NES, M. D., died at York, Pennsylvania, June 12th, aged 69. He was the inventor of the Nes Silicon method of converting iron ore into steel.

DR. ALBERT HOOVER, of Akron, died at Cambridgeborough, Pennsylvania, on May 14, aged 36. His death was due to pyemia, from an abscess, caused by injury to a testicle.

DR. WM. J. SCOTT died at Cleveland, Ohio, May 5, of organic heart disease. He was professor of medicine and clinical medicine in the medical department of the Western Reserve University at the time of his death.

EDWARD J. FOSTER, M. D., surgeon general of Massachusetts, died suddenly in New York of cerebral hemorrhage, on May 15th, aged 50. By his will he leaves his valuable medical library to the Boston Medical Library.

W. C. PEPINO, M. D., died at Des Moines, Iowa, June 3d. His death resulted from a fracture of the skull, caused by the kick of a horse. He was professor of rhinology and laryngology, Iowa College of Physicians and Surgeons.

Therapeutic Notes.

INJECTIONS OF HOT WATER IN THE TREATMENT OF CHRONIC DIARRHEA.—Pollatschek, of Carlsbad, has found that small, repeated injections of hot water are very beneficial in the treatment of chronic diarrhea. He uses only enough water at 104 to 109 degrees as will be retained and absorbed by the intestines, beginning with 100 grams. The effect is similar to that produced in vaginal and uterine troubles, relieving the congestion and calming the nerves of that region. The hot water also stimulates the peripheral centers that control the peristaltic movements of the bowels, and chronic diarrhea is often permanently cured by this method. Helles, of Lyons, has also recently published a paper on this subject. He recommends the decubitus dorsal position to retain the injection, and uses much hotter water, from 113 to 130 degrees.—*Semaine Medicale*, May 13.

THE following prescription, says Dr. Hare, administered in a fine spray to the nostrils, is sedative, antiseptic, anesthetic, and protective, in cases of acute coryza:

℞	Menthol	gr. viij	
	Camphor	gr. v	
	Albolene	ʒiv.	M.

POST-PARTUM HEMORRHAGE is treated by external abdominal manipulation and by the administration of drugs. The physician should find the uterus and make pressure in the pelvic axis, at the same time applying light and rapid massage. A gallon of water, 100 degrees F., should be used as a vaginal injection; the fluid extract of ergot may be injected deeply into the subcutaneous tissues at the sides of the abdomen. Strychnia may also be injected in 1-20 grain doses.—*Davis.*

THE following, painted on the corn night and morning for several days, will often afford much relief. At the end of such treatment the corn will, as a rule, come readily away:

℞	Acid salicylici	gr. xxx	
	Ext. cannabis ind.	gr. x	
	Collodi	ʒj.	M.

THE following is efficacious in checking the discharge in gonorrhea:

℞	Zinc sulphat. } aa	gr. xij	
	Acid carbol. } aa		
	Alum cond. } aa		
	Aq. destillat.	ʒvi	M.

Sig.—Use locally. (Dilute if painful.)—*Hare.*

A LOTION for local treatment of baldness may be made up as follows:

℞	Tinct. cantharidis	ʒiv	
	Tinct. capsici	ʒj	
	Ol. ricini	ʒss—ʒj	
	Alcoholis, q. s. ad.	ʒiv	M.

Sig.—Rub thoroughly into the scalp.—*Stelwagon.*

Books and Pamphlets Received.

Tumor of the Brain, with Double Nasal Hemianopsia, by J. T. Eskridge, M. D., Denver, Colorado. Reprint from International Clinics, Vol. I, sixth series.

Implantation of the Ureter Into the Bladder, per Abdominal Section, for the Cure of Ureterovaginal Fistula, by H. J. Boldt, M. D. Reprint from the *American Journal of Obstetrics*, June, 1896.

Vaginal Extirpation of the Uterus and Adnexa in Pelvic Suppuration and Septic Puerperal Metritis and Peritonitis. Same.

The Value of Strength Tests in the Prescription of Exercise, by J. H. Kellogg, M. D. Modern Medicine Library, No. 2.

The Extendion Corset and Its Indications, by Alex. C. Wiener, M. D. Reprint from the *Journal of the American Medical Association*, April, 1896.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL I. No. 4. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. AUGUST 15, 1896.

Original Articles.

METAPLASTIC TUMOR; SARCOMA OF OVARY; TUBERCULAR PERITONITIS; OVARIAN CYST.*

BY BYRON B. DAVIS, M. D.,

SURGEON TO IMMANUEL HOSPITAL, OMAHA, NEB.

The cases following fell into my hands at about the same time and were in Immanuel Hospital together. Each has some point of interest which merits consideration.

CASE I.—*Myo-Fibroma of the Uterus Containing Bone.*—Mrs. N., aged 42, married twenty-three years, has had eight children; five at full term, living; one at six months, dead; one at seven months, dead; and the last one at seven months is living, aged fifteen months. An abdominal tumor was first noticed during her first pregnancy, twenty-two years ago. It rapidly reached a large size and has not grown much since. The menses are regular and painless, but for a year she has been disabled and kept in bed two or three days of each week by a severe aching pain, through abdomen and back. In the intervals she is free from pain and feels well.

Examination.—A strongly built woman, of medium height, with an abdominal enlargement suggestive of full term pregnancy. A hard, movable tumor, somewhat lobulated, was found, extending to two inches above the umbilicus. The uterus moved with the tumor and the sound passed in to the depth of three and one-half inches. Operation was advised and agreed to.

Operation. — Dr. Detwiler assisted, and Dr. Driver, the house surgeon, gave the anesthetic. Ether was first used, but after ten minutes there was so much accumulation of mucus in the bronchi and such alarming cyanosis that chloroform was substituted and the anesthesia from that time was uneventful. As a preliminary to the abdominal operation the vulva and vagina were thoroughly scrubbed with soap and water, followed by bichloride. The cervix was then dilated, the uterus curetted and packed with a strip of iodoform gauze. This procedure is carried out in all my hysterectomies to minimize the chief danger in this operation, ascending infection from the vagina. The abdominal incision extended from near the pubes to the umbilicus. The tumor was found to have its origin in the anterior wall of the uterus and to have no pedicle. Hysterectomy was done by the Chrobak or Goffe method, the chief point of which is in making an anterior and a posterior flap and securing the uterine arteries before amputating through the neck. It is almost bloodless and obviates the necessity of temporary elastic constriction. After removal of the mass the mucous membrane of the stump was seized and trimmed out, and the cavity cauterized with a drop of pure carbolic acid. By means of buried continuous catgut sutures, sterilized by heat, the stump was next closed in and then covered by the peritoneal flaps, the whole pelvic cavity now presenting a smooth surface of peritoneum. Convalescence was uneventful, the temperature never rising above 99.6 degrees, except on the third day, when it reached 100.4 degrees, due evidently to distress produced by an enema. The bowels moved on the third day, and after the fourth day the pulse and temperature were normal. Sat up on the fourteenth day and left the hospital on the twenty-second day.

Examination of Tumor.—The weight of tumor and uterus was thirteen pounds. On cutting through the growth after its removal the knife came upon a substance like bone. It was about the size of a goose egg, situated almost exactly in the center of the tumor. It was found histologically to consist of a shell of true bone enclosing calcareous matter in its center. The remainder of the tumor was found to be a myo-fibroma.

It was the existence of one tumor within another which led me to bring this case before the society. It had never been my fortune to meet with such a condition before, and it was thought that others might be interested. Calcareous matter, mere degeneration, is frequent; but this is transformation, or, as Ziegler and Delafield express it, a metaplasia. The pathologists generally do not mention this phenomenon. Delafield dismisses it with less than a page, and Ziegler gives a fairly complete description. In his seventh German edition he says: "The metaplasia of connective tissue is to be distinguished equally from simple degeneration and from the 'process of growth.' In the first no new tissue is formed, but the old perishes; in the second new growth originates from the multiplication of cells. Metaplasia stands, as it were, on the middle ground between the two. New tissue is indeed formed, but cell-proliferation is lacking, or at least is not ap-

* Read by title before Nebraska State Medical Society, Lincoln, May 21, 1896.

Digitized by Google

parent." Ziegler concludes that metaplasia is a true metamorphosis.

Cells of one germinal layer cannot be transformed into cells of another germinal layer. One type of connective tissue can, by metaplastic change, become another type, but it is still connective tissue. The same is true of epithelial tissue. Sometimes the columnar epithelium of the endometrium is transformed into squamous epithelium. In this case the muscular or fibrous tissue, one form of connective tissue, was transformed into bone, another form of connective tissue.

CASE II.—*Sarcoma of the Ovary.*— Mrs. M., aged 20 years, married, was referred to me by Dr. Butler, of Beaver City, with the following history: Never pregnant; good family history. For over a year has been falling off in general health, and for the past eight months has been menstruating every two weeks, copious, and preceded for nearly a week by intense abdominal pain and shortness of breath, evidently due to gaseous distension. Has lost ten pounds in weight during the last three or four months.

Examination.—A spare brunette, with a countenance indicative of suffering. Abdomen enlarged to what we expect at the middle of pregnancy. External palpation discovers a hard, nodulated, pelvic tumor extending half way from the pubes to the umbilicus and well out into each iliac fossa. On bimanual examination it was found to extend well down to the sides and behind the uterus, the latter being well forward, but apparently within the mass. The diagnosis of uterine fibroid, with the possibility of sarcomatous degeneration, seemed a natural one. It was also deemed probable that a nodule on the left side was intraligamentous, and perhaps one on the right side.

Operation.—Dr. Brown assisted and Dr. Detwiler gave ether. The usual sterilization of the vagina, curettage, and packing of the uterus were done. Then the patient was put into the Trendelenburg position and an incision made from near the pubes to the umbilicus. The fundus of the tumor was found to be intimately adherent to many coils of small intestines by means of very vascular adhesions, many of the arteries varying in size from that of a slate pencil to that of a lead pencil. Very carefully, one by one, these arteries were ligated double by means of catgut and cut between,—the raw surfaces left on the coils of the intestine being covered by peritoneum. It was now found that the sigmoid flexure and upper portion of the rectum were closely adherent to the posterior part of the tumor by similar highly vascular adhesions. They were so intimate and the parts so inaccessible that for a time the difficulties seemed insurmountable. At last, by dint of hard work, using many ligatures and loosening where possible with the finger, the tumor was freed from its posterior attachment, though the hemorrhage and general oozing were great, and the patient's pulse at this time was reported as very weak and 144 per minute. Now, for the first time, the tumor could be examined more closely, and it was found not to spring from the uterus, but from the left ovary. The uterus was anterior to the growth and in a groove, the tumor, after prolapsing into Douglas' space, having grown around it and become adherent to the posterior wall. The patient being now in an almost pulseless condition, the growth was tied off and separated from the uterus as quickly as possible. The chance of recurrence would doubtless have been lessened had hysterectomy been performed, but the condition of the patient was desperate and it was desired to get her off the table alive. The right tube and ovary were in a perfect condition and were not molested.

The very bad laceration of the walls of the sigmoid flexure was repaired by a rapid continuous suture of fine silk. The mucous membrane was nowhere torn through, though in several places it was laid bare, the other coats of the bowel having been lacerated. The tendency for the free oozing of blood and the danger of a fecal fistula influenced me to introduce a Miculicz drain, and the upper portion of the abdominal wound was quickly sutured with silkworm-gut. Large doses of strychnine and digitalis had a favorable effect and within three hours reaction was fully established. There was never any abdominal distension from gas, and the bowels moved naturally on the third day. The Miculicz drain was removed on the fourth day and a small wick of iodoform gauze substituted. Patient sat up in three weeks and left the hospital the thirty-second day, with a good appetite, increased weight, and feeling well.

Was the error in the diagnosis in this case avoidable? In the light of the relationship of the parts found at the operation it does not seem possible that the real condition could have been determined beforehand. Other men in whose diagnostic skill I have great confidence arrived at the same conclusion and were no less surprised at what the operation revealed. The surrounding of the uterus by the tumor, the adhesions, the metrorrhagia, all gave countenance to the diagnosis of a uterine tumor. The microscope showed the growth to be a fibro-sarcoma, spindle cells and large round cells predominating. Its weight was five and a half pounds.

CASE III.—*Tuberculosis of Endometrium, Tubes, Ovaries, and Peritoneum.*—Mrs. B., aged 29, married seven years, never pregnant, was referred to me by Dr. McClanahan, her family physician, with the following history: With the exception of menstrual pain, had not had any serious illness until four years ago, when she had an attack of peritonitis, of which she almost died. Has had several attacks of pelvic inflammation since, the last

Digitized by Google

occurring seven weeks ago and confining her to her bed for four weeks. She has also, during the past four years, suffered from pain in the right lower extremity corresponding with the distribution of the sciatic nerve. Crutches have been necessary much of the time as an aid to locomotion.

Examination.—Bimanually two masses were found in Douglas' pouch to either side of the median line. Drs. Brown and McClanahan examined her at the same time, and we were all agreed that her continuous and prolonged invalidism, with no relief from any form of palliative treatment, rendered an operation imperative.

Operation.—Dr. Ewing Brown assisted and Dr. McClanahan gave ether. The uterus was first thoroughly curetted, a large amount of soft friable granular material being scraped away. Next a four-inch median incision was made and a coil of small intestine found adherent to the anterior abdominal wall. As soon as the cavity was entered both parietal and visceral peritoneum were found to be thickly studded by miliary tubercles. Absolutely no ascitic fluid. The fundus of the uterus and other pelvic contents were roofed in by a veil of exudation and coils of adherent intestines. These were carefully separated, and on the left side of the fundus what was supposed to be the left tube was found, but when followed away from the uterine cornu it was found to curve downwards and backwards into and across Douglas' cul-de-sac, and the other end to come out from the right cornu. It was then more carefully traced and found to be the right tube, elongated and much thickened, extending through posterior adhesions to the left side, its fimbriated extremity being adherent to and, so to speak, melted into the left tube near its uterine extremity. The right ovary was found embedded in adhesions in Douglas' pouch and it and the tube ligated and removed. The left tube was now traced and found to be intimately adherent to the upper part of the rectum in a mass of extremely dense adhesions. In loosening it, although most painstaking care was used, an opening was made into the lumen of the rectum large enough to introduce the tip of the forefinger. This was carefully closed by means of Czerny-Lembert sutures. The left ovary was a disorganized mass in Douglas' pouch found to the left of the right ovary, embedded in exudation. The pelvic cavity was next flushed out with hot sterilized water. For the same reason as in Case II a Miculicz drain was carried down to the bottom of the recto-uterine space, and the upper part of the abdominal wound united by silkworm-gut sutures. The patient stood the operation well, there being only slight shock. Gas passed per rectum on the second day, and the bowels moved nicely in response to a small enema given on the third day. There was no gaseous distension at any time. The highest temperature reached was 100.8 degrees, though the pulse was rather rapid and irritable for the first week, but no more so than has occurred before when no operation had been performed. The Miculicz drain was removed on the fourth day and a rubber drainage tube substituted. The wound at the site of the drain was healed on the eighteenth day and the patient was allowed to sit up on the same day, gained strength rapidly and at once found that the right lower extremity was freer from pain than it had been for many months.

The twelfth day after the operation Dr. McClanahan began treatment by the daily injection of aseptolin. The patient left the hospital on the thirtieth day. The scrapings from the endometrium, the tubes, and the ovaries were carefully prepared and examined microscopically. Tubercles and tubercle bacilli were found in all the sections examined. I did not suspect, and neither of the other gentlemen interested believed, that tuberculosis was present until the abdomen was opened. Dr. McClanahan had previously considered the possibility of tubercular peritonitis, but rejected it from the fact that there were no ascites, no enlarged superficial abdominal veins, no enlarged glands, and no suspicion in the family history. According to Penrose, tuberculosis of the Fallopian tubes is much more frequent than is generally supposed. In fifty-two cases of inflammatory diseases of the uterine appendages, nine were found to contain tubercles. In the case here reported there is only one way in which I can see that the nature of the disease could have been recognized before the incision. A curettage of the uterus and a careful microscopic examination of the products of the curette would have revealed the presence of tuberculosis, but even that would not have suggested that the disease had reached the peritoneum. The question which now naturally arises is, Where was the primary infection? There can be but little doubt that in most of these cases the tubercular endometritis is the primary lesion, and there is an ascending infection to the tubes, ovaries, and peritoneum consecutively. This was the probable order in this case, but I see no means of demonstrating it. Many cases of tubercular peritonitis in the female probably arise in this manner. Whenever a case is found where tuberculosis of the peritoneum or of the uterine appendages is suspected an examination of the products of the uterine curette is of value. If tubercular endometritis is found it makes the diagnosis almost certain; but failure to establish the presence of the disease in the endometrium would be only of negative significance.

Case IV.—*Multilocular Ovarian Cyst, weighing forty-seven pounds.*—Mrs. L., aged 56 years, widow. Has given birth to ten children; no miscarriages. Leucorrhea since the birth of her first child. Backache and dysuria for ten or twelve years. Menopause was passed three years ago. Fifteen months ago first noticed an abdominal tumor, and

Digitized by Google

it has been growing rapidly since, but without pain. It has now reached a great size, obstructing respiration and causing much irritability of the heart. Has been emaciating rapidly, and for the past month edema of the feet and legs has been presene.

Examination.—A large framed, much emaciated woman, with an immense fluctuating tumor filling the abdominal cavity almost to bursting. Flat percussion note everywhere, except in flanks and near ensiform cartilage. Girth at umbilicus 53½ inches. Distance from symphyses to umbilicus 12 inches; from umbilicus to ensiform cartilage, 13 inches. An attempt was made by a physician a few weeks ago to aspirate, but the fluid was too thick to run. Many superficial veins are to be seen over abdomen. Temperature ranges from 99.6 degrees to 100.4 degrees; pulse from 112 to 120. A small amount of albumin in the urine, but no casts.

Operation.—Dr. Detwiler assisted and Dr. Liliedahl gave ether. Abdominal incision five inches long. The tumor was found adherent to the abdominal wall for some distance around the track of the aspirator. The contents were gelatinous, and it was necessary to thrust in the hand and break up the hundreds of small cysts of which the tumor was made up. The external wall of the tumor was very friable and had previously ruptured, and much of the viscid gelatinous substance was found adhering closely among coils of intestines in all parts of the abdominal cavity. The omentum had the appearance of gelatin and was adherent to the tumor. About one-third of the omentum was ligated and removed. The tumor had its origin from the left side by a narrow pedicle and was easily removed. The abdomen was then flushed by pouring in pitcherful after pitcherful of hot normal salt solution, which was churned around among the intestines by means of the hand introduced into the cavity. All was then made dry by wiping with sterilized gauze. The parietal peritoneum was much thickened and the visceral peritoneum was red, thickened and injected, presenting the appearance usually found in cases of chronic peritonitis. At the close of the operation the pulse was 108, and neither pulse nor temperature ever rose again as high as before the operation. No pain at any time. Bowels moved the third day in response to a small does of Epsom salts followed by an enema. The stitches were removed the eighth day and the abdominal wound found to be healed. It is now the thirteenth day and the patient is sitting up.

Examination of Tumor.—The contents of the cyst and the cysts themselves were found to weigh forty-seven pounds. In view of the very rapid growth and the gelatinous contents a suspicion of malignancy arises. The cyst walls were carefully examined with the microscope, and found in many places to be lined by a true mucous membrane, the epithelium being of the columnar variety. Some portions of the walls present a glandular structure. There is little question that the growth should be classed as an ovarian adenoma. Bland Sutton says of this form of growth: "The malignancy of ovarian adenomata requires careful investigation. Evidence is accumulating in favor of the view that rapidly growing adenomata of the ovary may, if the loculi rupture, infect the peritoneum. In some isolated cases there is reason to believe that the growth recurred in the pedicle."

The future history of this case is of especial interest because of the following facts: (1) The very rapid growth; (2) some of the cysts having previously ruptured and discharged their contents into the general peritoneal cavity; (3) the bad condition of the omentum; (4) the presence of columnar epithelium and glandular structure in the cyst walls; (5) the imperfect knowledge still existing of the malignancy or benignancy of this form of neoplasm.

PUERPERAL ECLAMPSIA.*

By CHARLES ROSEWATER, M.D.,
PROFESSOR OF OBSTETRICS IN THE CREIGHTON MEDICAL COLLEGE, OMAHA, NEB.

Of all the emergencies with which the physician is liable to be suddenly confronted in his daily rounds, none present a more serious aspect nor tax his self-possession and obstetric knowledge in some instances more than this. Two lives which are in jeopardy are placed in his care, and upon his prompt and intelligent action their maintenance or destruction depends. Upon his accurate knowledge of the exact nature of the conditions underlying the train of symptoms he observes depends the selection of the means for their relief. Nay, more than this, upon his careful watching over the prospective mother depends the early detection and rectification of conditions which, if allowed to remain uncorrected, would be liable to lead to the very convulsions we are about to consider.

Let us first consider what is usually understood by puerperal eclampsia. It is generally understood to include all convulsions occurring during pregnancy, labor, or the lying-in state, except such as are due to hysteria, epilepsy, or cerebral lesions.

Convulsions due to the action of certain poisons might be added to this list. Lusk* defines eclampsia as a "term applied to convulsions tonic and clonic in character, the foundation of which is laid in processes connected with pregnancy, labor, and childbed." By this definition it is intended to exclude convulsions due to hysteria, true epilepsy, and cerebral lesions, which occur-

* Read by title before Nebraska State Medical Society, Lincoln, May 21, 1896.

Digitized by Google

rences in pregnancy are to be regarded simply as accidental complications. In eclampsia there is loss of consciousness during the attacks, with at first a disturbance of the intellectual faculties in the intervals, afterwards deepening in severe cases into coma.

It is a fortunate thing for humanity that these convulsions are comparatively rare, coming on, according to the general average of statistics, in one out of every 175 to 200 pregnancies. Professor Lusk* gives their frequency as one in 500 pregnancies, but a little mathematical calculation will readily show the fallacy of this statement. He claims that in New York in a given time there were 284,000 deliveries, and of these 408 cases were recorded as having died of convulsions, or about one in 700. As only an average of thirty per cent of the women attacked by convulsions die, according to the same author, this would make the number of cases occurring in all just about as I have given it. A few years ago I called Professor Lusk's attention to this slight error, but have seen no correction of it in his later editions.

Having shown the frequency of the occurrence of convulsions in pregnancy, let us now examine into the causes underlying this malady. Albuminuria has been found to be almost always present in such cases, and this coincidence was soon noticed, leading to the theory that eclampsia in the pregnant woman was due entirely to some kidney trouble, and a symptom simply of renal insufficiency and uremic poisoning. This theory was accepted and upheld by some of the leaders in the profession, such as Frerich, Simpson, Braun, and hosts of others, and indeed explains a large number of the cases met with.

Soon, however, cases were reported of albuminuria in pregnancy without the occurrence of eclampsia, as well as of convulsions occurring in pregnant women who showed not even traces of albumin. The theory above referred to could not explain all cases, and pathologists soon began to look in other directions for a cause.

Of them all, Traub and Rosenstein were the foremost, and presented views which were soon adopted by the mass of the profession. They said that the convulsions were not due to the condition of uremia, but rather to hydræmia; that the headaches, swelling of limbs, cardiac murmur, and poor appetite were due to the impoverished condition of the blood allied to anemia. The albuminuria was looked upon as of secondary importance, the actual outset of the convulsions being supposed to be due to an acute anemia of the brain brought about by pressure of transuded serum upon the brain substance and blood-vessels.

Lantos and Osthoff* look upon puerperal eclampsia as due to a violent reflex vaso-motor disturbance, and class it as an acute peripheral epilepsy.

"In 1887 Blanc* discovered in the urine of an eclamptic woman a micro-organism, which, when inoculated into rabbits, produced convulsions. Continuing his investigations, Blanc has lately found a peculiar slender bacillus, 1 to 2 micromillimeters in length, which also, inoculated, produces convulsive phenomena and later an acute nephritis. The blood and fluids of inoculated animals also produce convulsions. From these experiments the conclusion is reached that there are some cases of puerperal eclampsia due to an organism which causes infectious nephritis, and which appears itself to generate a convulsive poison."

These theories all sound very plausible, and yet no one of them explains the occurrence in all cases of eclampsia. We must consequently conclude that there are several causes operative in producing eclamptic attacks, such as the diminished excretion of urea, the general anemic condition of the system, and a neurotic disposition of the patient. Whether there is really a micro-organism at the bottom of all this is still an unsettled question. We are to-day living in an age of bacilli and micrococci, and every ill to which human flesh is heir is being traced to these organisms.

Case I.—On April 1, 1883, I was called to see Mrs. H. F., a primipara, in labor. She was twenty years old, of medium height, and inclined to be fleshy. Six weeks previous to above date she had had an attack of diphtheria, and for three weeks previous to confinement her limbs had been swollen and she suffered from frequent headaches. She had been in labor four hours and was being attended by a midwife. I was sent for on account of convulsions, which set in while the head was passing through the pelvis. I found vertex presenting, os fully dilated, head well down in pelvis, pains of medium severity, patient semi-conscious. Shortly after my arrival she went into another fit, about one-half hour after the first one. She became cyanotic in the face, developed muscular twitchings about the eyes and mouth, gradually increasing and extending to the muscles of the neck and arms. She threw her arms about, rolled her eyeballs, tossed her head from side to side, wildly clinching her teeth, and became utterly unconscious. This only lasted a few minutes and then she quieted down. I applied forceps immediately and delivered her of a healthy twelve-pound baby. The placenta was delivered by expression (Crede's method), but soon afterwards she went into another convulsion in spite of having received a large dose of chloral and bromide. I now sent for Dr. M. R. in consultation, who, upon his arrival witnessed another convulsion and gave a hypodermic of about 1½ grains of morphia. This soon quieted her and she remained in a stupor for over twenty-four hours, but ultimately made a good recovery. The

* Lusk, The Science and Art of Midwifery, 1893, p. 567.

* Annual Med. Sciences, 1890, vol. II, K. 9.

Digitized by Google

urine was drawn by a catheter and found to contain a large quantity of albumin and a few casts. Five months afterwards she informed me that she had had those "fits" frequently since the confinement and was still an occasional sufferer from headache and backache. About two years afterwards she was delivered without complications of another healthy child.

Case II.—Mrs. B. M., a small Irish lady, well built and of healthy appearance, sent for me in May, 1889. She was at that time pregnant seven and a half months. Her husband claimed that she had pains, but as I was sick at home, I sent him to Dr. G. When he reached home he found that the supposed pains had quieted down and so he sought no further medical aid.

In June, while calling at Dr. G.'s office, I found Mrs. B. M. there. The doctor was not in and I did not wait until he returned. I was told afterwards that Mrs. B. M. did not wait nor seek other medical advice. She had gone to Dr. G. on account of headache and swollen feet. I met Mr. M. several times after that, but thinking his wife was under Dr. G.'s care, did not warn him (Mr. M.) of the danger approaching. In the early part of July, Mrs. M. was taken down with labor pains during the night, and Mr. M., not finding Dr. G. at home, called in Dr. B. The latter found head presenting, patient in convulsions, and sent for Dr. B. No. 2 to aid in applying forceps. Meanwhile the people, being quite anxious on account of repeated convulsions, sent after Dr. T. When the latter reached the house he was met at the door by the nurse and informed that the patient was dead; there was no need for his services. A hypodermic had been administered for the convulsions, but the patient died one-half hour after the birth of her child.

Case III.—Mrs. O., primipara, 31 years old, who had been subject to occasional headaches ever since reaching puberty, engaged me to attend her in childbirth, which event she expected toward the end of September. I called on her September 1st, and found the following condition presenting: Small, Swedish woman, with pale face, puffy eyelids and lips, coated tongue, bowels constipated, nervous temperament, feet edematous. Patient complains of almost continuous nausea, headache, and backache.

Auscultation reveals a systolic murmur at apex of heart; otherwise nothing abnormal about heart or lungs. Abdomen not enlarged more than one would expect at this stage of pregnancy. Fœtal heart sounds distinctly audible. Vaginal examination reveals pelvis roomy; nothing else worthy of mention.

Urine is passed in small quantities, highly albuminous, but contains no casts. Assuming this to be a case of hydræmia or anemia, I prescribed

℞ Pulv. digitalis,
Ext. nuc. vom. . . . . aa gr. viij.
Ferri carb. . . . . ʒss.
Quin. sulph. . . . . ʒj.
Ex gentian . . . . . q. s.
Ft. pil. No. xxx.
Sig.—One pill three times a day.

Also ordered patient to take three compound cathartic pills every third night, and to make a tea of uva ursi leaves to be used during the day as a diuretic.

In about two weeks the œdema disappeared, the headaches subsided, appetite returned, and the patient was able to rest much better through the night. The urine also contained much less albumin and was passed in larger quantities. I warned the husband of the danger ahead, and told him to report to me from time to time as to the patient's condition. I did not hear from him again until October 14th at 1 P. M., when I was sent for. Patient claimed that pains had begun at 6 A. M., and came on at various intervals, sometimes in rapid succession, and again letting up for quite a stretch of time. I found child lying with head on right brim of pelvis. Through the slightly opened os I could feel a small stringlike body, corresponding in size and feel to the funis. No pulsations could be felt in this supposed funis, but the fœtal heart sounds were distinctly audible in the left iliac region. Bowels moved this morning. Patient complains of slight headache. Feet not swollen. I directed patient to be inclined slightly toward the left side to favor engagement of the head in the superior strait. Ordered digitalis and iron pills to be continued.

4 P. M. Os completely closed; no pains; head over pelvic entrance, but still movable. Labor did not set in on that day.

October 22d. Was called at 3 A. M. on account of convulsions. Her condition previous to my arrival was described as follows: She became very restless and nervous, and attempted to get out of bed, but after slight muscular twitchings fell down in spasms, during which the thumbs were held within the closed fist, the tongue was protruded, the eyeballs rolled about, and the patient became blue in the face and unconscious. These convulsions occurred twice before my arrival, and during one of them the husband had to push the tongue back into the mouth to prevent it being bitten. At the time of my arrival the os was probably one-half inch in diameter, pains few, far between, and ineffective.

4 P. M. Os fully dilated, head low down in pelvis, pains frequent and hard, child born without further trouble 5:30 P. M., the passage of the shoulders causing quite a tear in the perineum. Following the birth of the child the uterus failed to contract properly, severe hemorrhage ensued, and I was compelled to remove the placenta by introduction of my hand into the uterus. I then gave fl. ext. ergot and prepared to sew up the perineum.

Digitized by Google

While the second stitch was being passed patient went into a convulsion—a characteristic puerperal convulsion as described in connection with one of the previous cases. She was soon quieted by inhalation of chloroform, and then an enema containing 30 grains of chloral and 30 of bromide of soda was given. She fell into a natural sleep and awoke toward morning feeling somewhat dazed and without any recollection of what had happened.

Proper antiseptic precautions having been pursued all through the management of the case, the patient made a rapid and complete recovery with an entirely afebrile course. I saw her on December 18th, and was informed that she had had no further trouble and was abundantly able to nurse her child.

Cases II and III illustrate beautifully what timely care will do under certain circumstances, and what will result where the early warnings of disease go unheeded and unchecked. There is no doubt but that in Case II the attending physicians pursued the only course open to them, and a course which is endorsed by the majority of authorities.

The death of this patient is rather to be attributed to her passing by, unheeded, the serious symptoms which showed themselves several weeks prior to the onset of labor, and which might possibly have been relieved if taken hold of at that time. This was done in case No. III, and the result was that when the patient did finally get the convulsions they were milder and easier to overcome.

The treatment of puerperal eclampsia may properly be divided into two distinct categories, the preventive and the curative. As the tendency towards the accumulation of effete material (especially urea) in the blood, an impoverished condition of the latter, an inactivity of the excretory functions, and a pecular sensitiveness of the nervous system, are the main predisposing causes of puerperal convulsions, all those measures which tend to correct these various morbid conditions are the proper means to be used in preventing the onset of eclampsia.

Diuretics, diaphoretics, and cathartics, to eliminate the urea held back by the renal insufficiency; tonics, to improve the appetite and condition of the blood; fresh air, judiciously combined with rest and avoidance of all sources of nervous excitement, are all the measures properly coming under the head of the prophylaxis of eclampsia. As will be seen at a glance at the cases noted, it is of importance to see the prospective mother from time to time during pregnancy and check in their incipiency any derangements which might occur. Examine her urine from time to time, so as to see that the kidneys are performing their function properly. In this way derangements which might ultimately lead to serious complications may be averted by timely treatment.

The prophylactic treatment must aim at putting the patient in the best physical and mental condition possible for her safe conduct through childbirth.

The curative treatment, or, in other words, the measures to be resorted to when eclampsia once sets in, is a great field for dispute among leading authorities. In order to consider this question properly it will be necessary to discriminate between convulsions occurring during pregnancy, those occurring during labor, and those occurring post-partum.

Where convulsions occur during pregnancy, and prior to labor, opinions are divided as to whether it is advisable to immediately interrupt the pregnancy by inducing labor, or whether the pregnancy should be ignored and the convulsions simply quieted, and the case treated as I shall explain farther on. Were I to have my choice, I would prefer to alleviate the convulsions first if possible, and then, if the child has reached a period of viability, labor could be induced. The methods of induction of labor do not come within the scope of this paper, therefore I shall not go into further detail regarding them.

If the convulsions occur during labor, by all means hasten the latter by whatever measures are the most practicable in the given case. Where the head is presenting, and in proper position for delivery by forceps, the latter should be applied to expedite labor. Be careful that the uterus is thoroughly emptied, and see to it that all proper aseptic and antiseptic measures have been followed to prevent sepsis.

The treatment of the convulsions seems to be the disputed point among the leading authorities, such as Cazeau, Lusk, Fordyce Barker, Kleinwaechter and others. In the main there are four lines of treatment laid down, and as each seems to have its ardent adherers each must possess some virtue; but inasmuch as neither has appreciably lowered the mortality from puerperal eclampsia, it seems that there is still room for improvement, and that the right method of treating this dreaded complication of childbirth is still unknown.

The one line of treatment representing the views of Cazeau, Fordyce Barker, and others, especially of the older authorities, is venesection.

"Bleed the patient freely," says Cazeau,* "drawing from 14 oz. upward. If the first venesection of 14 oz. makes no impression, wait two or three hours and draw again an equal quantity; and if this is of no avail, and you have to deal with a plethoric patient, another pint of blood may be drawn." Cazeau seems to have great faith in this procedure, and pronounces it decidedly the best. Simultaneous with the venesection, he advises the administration of cathartics and diaphoretics —castor oil, one to three ounces, or, still better, calomel, 2 grs. every fifteen minutes until it purges. If the patient cannot swallow, give pur-

* Cazeau and Tarnier's Midwifery.

Digitized by Google

gative enemata. Cazeau disapproves of the use of opiates and anesthetics, and will only allow of their use after his favorite remedies have proven unavailing.

Lusk and Kleinwaechter stand directly opposed to Cazeau in their views, the latter more so than the former, for, while Lusk allows the use of venesection followed by narcotics and anesthetics, Kleinwaechter claims that venesection is at best only a measure to relieve the existing convulsions, but tending to favor their early return, and only weakens the patient, thus diminishing her chances for ultimate recovery.

After venesection, or independent of it, chloroform and morphia seem to be the most widely used agents in allaying convulsions and preventing their return. Chloroform should be only inhaled in sufficient quantities to allay the existing convulsions, and then a hypodermic of 1-6 to 1-2 gr. of morphia should be given. After beginning with the inhalation of chloroform an enema containing 30 grs. each of chloral hydrate and bromide of potassium are given, the anesthetic being suspended as soon as the effect of these remedies has set in (Lusk).

Lusk as much as condemns the use of chloroform and venesection as remedies for convulsions post-partum in the following language: "Chloroform and venesection should be employed with extreme caution, if indeed they are ever entitled to confidence at that time."* He relies mainly on the use of opium, chloral, veratrum viride, or digitalis, as the special case may indicate.

Veratrum viride has had its ardent advocates for many years, but none have been more ardent in its support than Professor Reamy, who, in an article read before the American Gynæcological Association about a year ago,† cites a series of brilliant results achieved by the use of veratrum viride, judiciously supported by hypodermic injections of morphia. He gives it in doses of 15 minims every hour or two till the pulse drops to below 50 per minute, and the depressing effect of the remedy becomes marked. The danger of too great depression is overcome by the timely administration of a hypodermic of morphia (1-6 to 1-2 gr.).

Pilocarpin also has its advocates, having been used apparently with great success in a certain number of cases. It should, however, be used very cautiously, as fatal results have followed its use under such circumstances as to make it appear that the pilocarpin was the cause of death (Eulenburg). Kleinwaechter recommends that it be used only in the beginning of convulsions.

As has been said before, while there are numerous methods of treatment and numerous remedies, each of which has its ardent supporters, the latter have failed to reduce the mortality from puerperal eclampsia appreciably; and until this has been done it may reasonably be doubted whether we are in the right at present in our views as to the pathology and treatment of this disease.

* Lusk, *loc. citat*, p. 581.

† American Gynæcol. & Obst. Journal, June, 1895.

A CASE OF STRICTURE OF THE ESOPHAGUS, THE RESULT OF EMPYEMA.*

By J. H. MILLER, M. D.,

GERING, NEB.

The only apology I offer for the presentation of this case for your consideration is the fact that such cases are of rare occurrence; and although the patient died, there are many points of interest connected with the case. It certainly is a rare thing for an empyema to evacuate spontaneously into the esophagus. In looking up the literature on the subject, no cases were found where such an occurrence had happened, yet I do not take it for granted that cases of this nature have not been recorded.

On April 26, 1894, I was first consulted by Mr. H. O. B. He was 39 years old, married, an American, and a butcher by occupation. He claimed always to have been healthy, till about one month previous to this time, with the exception of some slight stomach trouble, which he had had for some time. About a month prior to the time he consulted me, he moved from Ft. Collins, Colo., to Gering, this state. He dated the beginning of his trouble from that day, although it was apparent to his friends that he had been losing strength and flesh for some time previous. At this time his only complaint was that he vomited his food at once upon eating it. He had no pain, nor any other symptoms of which he complained. At this time I made no physical examination, yet I suggested the possibility of an obstruction in the esophagus; but owing to the fact that there was nothing in the history of the case which led me to suspect a stricture or a tumor, I dismissed it from my mind with the thought that perhaps it was a case of irritable stomach, due to the indigestion of which he complained, and prescribed accordingly. Four days later I left and was absent nearly a month. In the meantime he began taking all the patent nostrums suggested by his friends, till there was nothing left untried in that line. Then he concluded to try the mysteries of homeopathy, which he did, with no improvement, but was continually growing worse. This treatment was continued till July 20, '94, when I was asked to take charge of the case.

The following is the history of the case from the time I prescribed, about three months previous, until I took charge of the case: The one symptom of which he complained, namely, vomiting, became more and more marked, until he was unable to retain any food in his stomach. Upon closer questioning and from observation I learned that instead of the food being vomited, it was re-

* Read before the Nebraska State Medical Society, Lincoln, May 20, 1896.

Digitized by Google

gurgitated without any effort or nausea. He was unable to take solid and semisolid foods, but able to take a little liquid nourishment. By drinking very hurriedly and continuously he could get a small quantity of ice-cold milk, lemonade, or water in the stomach, but the greater part would immediately return without any effort or nausea. The effort to swallow could be repeated at once without the least inconvenience, and with the same result. At short intervals, for about fifteen minutes after an attempt of this kind, small quantities would be rejected. Hunger and thirst became intense and patient became greatly emaciated, losing twenty-five pounds in the previous four weeks. He also began to spit some dark blood mixed with pus, which was very offensive. This would usually be expectorated in the morning or after an attempt to drink or eat. The total quantity expectorated was not very great. There was no cough or pain, or any other symptoms of which he complained, except the indigestion as above stated, together with constipation. He became very weak and was compelled to give up his occupation and take to his bed about one month previous to this. Although it was very evident to his friends that he was rapidly failing, he was laboring under the impression, strengthened by his physician, that he was improving and would soon be well.

Examination showed extreme emaciation and weakness; the skin was dry and tightly drawn, and of a sallow hue. The temperature was 99 degrees, and pulse varied from 60 to 70 per minute. The abdomen was very much retracted, so much so that the aorta and the spinal column could be felt. The liver was normal in size, and examination of the urine showed the kidneys to be healthy. Pressure in the epigastric region elicited pain which was quite severe. The stomach was empty and contracted. There was obstinate constipation. The sounds and rhythm of the heart were normal. No physical examination of the lungs was made, as there were no symptoms pointing to them, yet this was a mistake, as will be made manifest later.

An attempt was then made to insert a stomach tube for diagnostic purposes, but it could not be made to enter the stomach. Probes were then tried, the smallest being about three-sixteenths of an inch in diameter. All came to a sudden stop about three inches before entering the stomach. The patient being very much exhausted, no further attempt was made to pass a probe, and he was informed that there was an obstruction in the esophagus, which accounted for his inability to swallow. The friends were apprised of the fact that in all probability death would soon follow.

Nutrient enematæ were ordered and no attempt was made to take anything into the stomach for twenty-four hours, after which he was allowed to drink water and lemonade, since by drinking slowly, by this time, it would enter the stomach. It was evident, however, that he was failing each day, still there were no new symptoms till 2 o'clock in the morning of the 26th of July, when he was awakened by severe pain in right chest, just below the nipple. This pain was constant and relieved only by morphine. He died July 29th, three days later.

The autopsy revealed a constriction of the esophagus three inches above the cardiac orifice which would not admit a lead pencil without force. The length of the stricture was about one and a half inches, and was caused very largely by cicatricial tissue with cells of proliferation. Through this dense tissue was a small opening, which was in communication with an old abscess cavity in the right pleura. There was a small quantity of pus in the cavity. The whole right lung was hepatized and only about one-third its normal size. It was very heavy and bound to posterior wall of chest by strong adhesions, and showed that it had been inactive for some time. The stomach was about normal in size, but the whole mucous membrane presented the appearance of chronic inflammation. All the other organs were normal.

But few comments are necessary. It is very evident that the stricture was caused by the spontaneous evacuation of the abscess into the esophagus, but the singular part is the fact that there were no symptoms of which the patient complained pointing to any chest trouble. No pain, cough, or shortness of breath of which he spoke, either during his illness or at any time previous. For these reasons I did not make a physical examination of the chest, which alone would have revealed the diseased condition.

While empyema is sometimes insidious in its development, it rarely, as has already been stated, points into the esophagus. Of how long standing this abscess was, it is impossible to state, there being no previous history; but about two years previous he was examined for life insurance in the New York Life and was passed upon and accepted by the company as a good risk.

MEDICAL EXPERIENCE AMONG INDIANS.*

By GEORGE W. IRA, M. D.,
SANTEE AGENCY, NEB.

The medical department of the Indian service has been under civil service rules since March 1, 1892. Any physician desiring to enter the service, by addressing the civil service commission, Washington, D. C., will receive blank forms of application giving all necessary information and instruction. The age limitation is between twenty-five and forty-five. Examinations are held at stated times and at different points in the United States. Applicant may select time and place. As soon after the examination as papers can be

* Read by title before Nebraska State Medical Society, Lincoln, May 21, 1896.

Digitized by Google

examined applicant is notified by mail whether or not he has passed. If passed, applicant is then eligible for appointment and liable to be notified at any time. After appointment the applicant reports for duty; he is then on probation for a period of six months. It is required of an officer under whom a probationer serves to carefully observe and report in writing upon the service rendered, the character and qualifications of such probationer as to punctuality, industry, habits, ability, and adaptability.

The agency physician is required to devote his entire time and professional skill to the Indians and agency employes, use his best efforts to overcome the influence of the native medicine men, to abolish their superstitious rites and barbarous customs, to gain the respect and confidence of the Indians, and to extend his influence among them by kind treatment, exemplary habits, and prompt attention to the cases requiring medical and surgical treatment. He is not only to attend to those who call upon him at his office, but to visit them at their homes, and, in addition to prescribing and administering needed medicines, to use his best endeavors to educate and instruct them in proper methods of living and caring for health; carefully look after the sanitary condition of the agency and the schools, and promptly report to the agent any condition of buildings and grounds liable to cause sickness. He is also required to make regular visits to the schools and give brief talks to the pupils on the elementary principles of physiology and hygiene, explaining in as plain and as simple a manner as possible the processes of digestion and assimilation of food, the circulation of the blood, functions of the skin, etc., by which they may understand the necessity of proper habits of eating and drinking, for cleanliness, ventilation, and other hygienic conditions; the correct manner of treating emergency cases, such as dangerous hemorrhage, syncope, prostration from heat, etc.; form classes of the most advanced and intelligent pupils for special instruction in regard to nursing and caring for the sick, administering medicines, and preparing food for invalids. Monthly sanitary reports must be made to the Indian office showing the number of cases and the nature of the diseases treated. All cases treated must be properly accounted for by recovery, death, or otherwise. Births must also be recorded. The number of Indians on a reservation varies from 1,000 to 18,000; and, of course, when a man is required to do what it would take from three to ten men to do properly, much of his work will not get the attention that it properly should, and some of the most unimportant be neglected entirely. I noticed in a recent report of a commissioner of Indian affairs, where a comparison was made of the average cost of treatment of each case reported in the army, navy, and Indian service, the army was $18, navy $22, and in the Indian service $1.25 each. My experience among Indians extends over a period of over seventeen years, and has been confined to the Omahas, Winnebagoes, Poncas, and the Santee Sioux of Nebraska, and the Yankton Sioux of South Dakota, and differs in many respects to practice among a more civilized people, although all of the above are considered semi-civilized.

Perhaps one of the most difficult things a physician has to contend with on entering the service is his inability to talk the language. He has to depend upon interpreters, many of whom, while they understand both languages, are as ignorant and superstitious as the full-blood Indian, and often interpret to suit their own ideas, regardless of the physician's directions. The Indian dislikes to be questioned, consequently it is difficult to get at the facts in the case. It is difficult to get intelligent answers. One has often to put his questions in many different forms before an answer is obtained, and then you may not get a truthful one. They think a physician should look at a patient and know all about his disease without asking questions (and this before Röntgen's X rays were ever heard of). And after you take pains with your diagnosis and prescription, they are liable to use their own judgment about taking it. They never hesitate to call you. It costs them nothing except the trouble. They seldom send in the night. If an Indian gets sick enough in the night to die they usually let him die. A physician in the Indian service is usually isolated and has to depend almost entirely upon his own resources, and when assistance is needed he has to utilize whatever is in reach, Indian or white, and with the limited supply of medicines and instruments furnished by the government his ingenuity is frequently taxed to its utmost capacity. They are much like children, and are often very unreasonable in their demands. When I have time I frequently make visits to satisfy them, when I know a visit is unnecessary. The present supposed-to-be wise and hopeful policy of the Indian bureau to break up tribal distinctions, give the Indians land in severalty, educate them, abolish polygamy, barbarous customs and heathenish practices, and to keep whiskey from them, has by no means accomplished what was hoped and expected of it. It has some very serious drawbacks. When you make citizens and voters of Indians that takes nearly all authority over them out of the hands of their agent and makes him simply a disbursing officer, and they are by no means slow to find it out, and the result is, in most cases under our observation, an increase in drunkenness and debauchery. Of course for such offenses you can have recourse to the courts, but that is tedious, expensive, and unsatisfactory, as there is as yet no provision made for funds to prosecute for crimes and misdemeanor cases. So unless the injured parties are able and willing to guarantee expenses, offenders frequently go unpunished. In fact the Santees are no further advanced toward civilization than they were ten years ago, if they have not retrograded. And in my opinion they

Digitized by Google

never will be until they are thrown on their own resources. My plan would be for the government to give them all that is due them and give them distinctly to understand that hereafter they must take care of themselves (root, hog, or die).

According to the many reports published at different times in the last ten years of the rapid strides of the Santees toward civilization, one would think they were almost self-supporting; that they were liable at any time to notify "Uncle Sam" that they did not need and would not accept any further assistance; but the facts are, the government is furnishing them their food, clothing, farming implements, horses, cows, hogs, seeds, houses, barns, schools, employing mechanics to do their repairing, and furnishing material, medical supplies, and a physician to dispense them, and most of the money to buy their whiskey, and they furnish the rest. One marked change, however, among the Santees for the better is the marriage relation, which I attribute to Christian civilization. When I first knew them marriage was mainly a matter of convenience, with nothing especially serious or binding about it; either party leaving the other as they thought best, many of them having more than one wife. Polygamy is now unknown, and all are legally married and look upon the marriage relation as binding; and any that wish to be relieved from it apply to the courts the same as whites.

The diseases prevalent among Indians are similar to the whites in the same vicinity, except tuberculosis, which is much more prevalent than among the whites. I think, without exaggeration, four-fifths of the adults or those over fifteen years old die of tuberculosis in some form or other, and those under fifteen are by no means exempt from it. It seems to be hereditary, and develops as readily among the most healthy pupils in the boarding schools, with the best of sanitary surroundings and an abundance of wholesome food, as those that remain at their homes; which proves to my mind that it is not developed by their mode of life and unsanitary surroundings. A disease that is almost unknown among them is diphtheria. In all my experience I do not remember of but two well developed cases among Indians, both of which yielded readily to treatment.

Puberty is reached from the twelfth to the sixteenth year. I believe that savage life neither hastens or retards puberty, but that climate, occupation, and hereditary tendencies are the factors of greatest importance. The menopause seldom causes any trouble. The age at which it comes shows as wide a diversity as it does among civilized women. It may come abruptly or it may require several years. Marriage in most tribes is consummated very early in life,—at sixteen or under; in many cases almost as soon as puberty is reached.

The ease with which parturition is accomplished among Indian women is an interesting fact, and it is a fact that the squatting or kneeling position that they assume during labor is more favorable to muscular effort than the position with which we are familiar in the "lying-in chamber;" and it is a very suggestive fact. So also is the total absence of puerperal disease; and I believe it to be the result of pure air and abundance of exercise, and not of antiseptics or even ordinary hygiene. The rapid recovery and return to their ordinary duties of the Indian parturiants suggest the possibility that we sometimes unnecessarily make invalids of our obstetric patients. Accidents occasionally occur, just as they do among animals, Nature's work being sometimes far from perfect. This means death to mother or child, or to both, unless an intelligence beyond that of the Indian is summoned to avert it. They have what they call midwives, but they simply do nothing, for they know nothing to do.

As an illustration, I will relate a recent experience or two. I was called in a cold night to a log hut, about 6x24 feet, with an earth floor and shingled with the same material, one room containing five beds, with an average of three persons in a bed, room heated with a cooking stove near the center. My patient was in a kneeling position at the rear of the stove, in her ordinary clothing, on a bunch of hay with a blanket spread over it, surrounded by her attendants—three Indian women. I halted at the stove to warm my hands and take observations. In from three to five minutes the child was born and cried vigorously. They cut the cord after tying it and wrapped the child in a blanket; they then requested the woman to stand up; one of the attendants persistently holding on to the cord (I presume to keep it from getting away), not using any traction. The placenta failing to come away, they then called to the husband and directed him to stand directly in front of the patient with his back to her, she putting her hands over his shoulder, he taking hold of her wrists and leaning forward so as to raise her feet off the floor, and by an up-and-down motion attempted to shake the placenta out, but that did not succeed. I discovered about that time there was a profuse hemorrhage. I stepped to the front, directed them to lay her down, removed the placenta, saw to the proper contraction of the uterus, and left them, very glad to get a breath of fresh air. If you are fortunate enough on such occasions to get hold of a towel or rag it is dirty; water the same. They may have some common soap and they may not. That, gentlemen, is the kind of antiseptic midwifery we practice among the Indians, and with no perceptible deleterious results. The above patient was up and around in a day or two, apparently well.

At another time I was called, and arrived late. This was in a large tent. I found the patient in the usual position, on her knees, near the center of the tent; the child born and lying on the ground, exercising its lungs vigorously; the patient was flooding profusely; an Indian woman

Digitized by Google

was standing over the patient with a large tin dipper full of cold water. This Indian woman would fill her mouth with water and spray or blow it down the spinal column of the patient, one mouthful after another, as fast as possible. It required more water than the modern spray producers.

The medicine man or conjurer was once looked upon with great respect and always appealed to in all great and important undertakings. But he is fast losing his influence. In fact, he is almost obsolete. I once asked a medicine man if he was ever called in case of obstetrics. He replied, only as a last resort. He said they usually left that to the women. He laughingly related a case that he was called to after all else had failed. He said the woman had been sick for three or four days; was in a tent alone, not knowing he had been called. It was raining. He took off his wet moccasins and slipped quietly into the tent, threw his moccasins on the ground with great force, and gave a war-whoop which frightened the woman and the child was born forthwith. He saw what had happened and then began to use his rattle (a gourd containing the dried seeds), and sang for a few moments, then quickly painted a turtle on the side of the tent and shot through it (the conjurer always carries his gun and rattle). He informed them the turtle had caused all the trouble, but he had killed it. That being an extraordinary case, he charged two horses for his services, his usual fee being only one.

An abnormal presentation is of rare occurrence. I have never known of a ruptured perineum, and have never but three times, in all my experience with Indians, resorted to the use of forceps. The first was a multipara with a normal presentation and roomy pelvis; but my time was limited, and I applied the forceps and delivered simply to gain time. The second was a half-breed with twins, primipara; had been in labor forty-eight hours when I arrived; normal presentation, but pains weak; applied forceps at inferior strait and delivered first child. The second was delivered in the course of half an hour without forceps. The third case was a full-blood multipara with roomy pelvis. She had been in labor twenty-four hours. I found on examination face presentation, with head engaged, chin posterior. I first made an attempt to convert the presentation into that of the occiput, but made a dismal failure. I then applied the forceps and delivered without any special difficulty, and without injury to mother or child. It is a rare thing for labor to interfere with their usual duties for more than a day or two at most. The case above last referred to was up and around on the second day.

The fact that pelvic disease has been treated but little among Indian women does not prove that it does not exist. Those diseases that result from infection, deformity, mal-development, and faults of circulation do exist to a limited extent, but they will usually go untreated and mostly unheeded until the suffering caused by them becomes greater and confidence in educated physicians stronger. Malignant diseases of the reproductive organs are almost unknown among Indians, which shows that neither privation, hard work, laziness, exposure, or giving birth to many children necessarily result in the neoplasms that so frequently afflict civilized women.

It is generally understood that both local and constitutional forms of venereal disease abound among Indians, but in my experience I have seldom seen the initial lesion of syphilis. But acquired syphilis never develops spontaneously. It always begins with the development of a local lesion. As Ricord graphically remarks: "Syphilis never invades the organism without causing its gap." This gap, this port of entry, is the accident of contagion (initial lesion), which is the prelude of all others, while it is always separate from them by an interval more or less long, and which is the indispensable exordium. But the great mortality among infants and the great prevalence of glandular and pulmonary diseases among many of those that survive infancy are unmistakable evidence of the inroads that venereal disease has made upon Indian vitality.

Syphilitic dactylitis is quite common among Indians. It is a rather late manifestation which may affect either the fingers or the toes. It first manifests itself by reddening of the integument, which soon becomes tense and quite resistant. The tense condition becomes so marked that the lines of the skin disappear. A swelling manifests itself, and this varies greatly in shape and size according to the nature of the process itself and to the tissues which are involved. In all cases the enlargement is gradual and assumes marked dimensions; this increase in size interfering with the mobility of the affected member, more especially if the process is most marked about a joint, as occasionally happens. There are two varieties of syphilitic dactylitis observed in the acquired form of the disease. First we have that in which the subcutaneous tissue and the fibrous structure about joints which are involved; and second, that in which the periosteum and bone are involved, implicating other structures secondarily. There are certain peculiarities or differences to be observed in the respective implications of the fingers and toes; when the latter are implicated the entire member is included in the process, whereas, when a finger is affected by this trouble it is usually the proximal phalanx which is attacked. Some of the characteristics of syphilitic dactylitis which should be noticed include the fact that the swelling and thickening are most marked on the dorsal surface. The palmar surface shows very little, if any, changes of such a character as to attract attention, unless it be the increase in width of the affected member. While the proximal phalanx is most often involved, the next one may share in

Digitized by Google

the process, or the whole finger may even be affected. While it may be the periosteum and subcutaneous structures alone which may be implicated, cases occur in which the bones are affected, osteomyelitis or specific periostitis being present. In such cases there is a marked difference in the appearance of the affected member. In the first form described there is more or less of a fusiform shape; whereas, in the second, the phalanx has a round appearance and the diameter is quite large, giving the finger an appearance as though it had been stuck through a small lemon. It is not an unusual thing in cases of syphilitic dactylitis to observe a permanent thickening of the bone, which may remain alone or be accompanied by a compensating circular atrophy of the phalanx. In some cases of dactylitis in which bone involvement has been marked, it is not unusual to find involution take place at a comparatively rapid rate, and where there was hypertrophy atrophy sets in, which may be either circular or longitudinal, as it is no rare thing to observe necrosis in these cases. Loss of bone is apt to follow, and absorption, together with a shortening of the finger, results. This shortening is an absolute and marked one. A strange circumstance in connection with all of these cases is that little or no pain is felt, and when absorption of the bone occurs there is no ulceration of the soft parts.

Much care is necessary not to mistake cases of enchondroma of gummata or of hyperostosis for dactylitis. A critical examination should be sufficient to determine which variety of the lesion is being dealt with, as well as define the form and extent of the implicated tissues. The subjective symptoms can hardly be used as a guide, and more dependence is to be placed upon palpation in order to establish a differential diagnosis. As this trouble is a late secondary manifestation, or one showing itself at the transition period, when the deeper tissues and structures become involved, the iodides are manifestly in order, more especially as the fibrous structures about the bones and the bones themselves are attacked. Locally, if the periosteum be thickened and much tension exist, a free and deep incision will prove of benefit. Systematic mercurial friction, however, will be found quite sufficient and effective as an aid in causing the disappearance of the trouble.

Surgery is limited to an occasional amputation, fractures, dislocation, necrosis, benign tumors, wounds, etc. In my early experience I avoided all incisions and cutting operations, so far as possible, on account of the suppuration following and the difficulty experienced in getting wounds to heal. I then thought it impossible to secure the healing of a wound by first intention on an Indian, but I have learned better. I now almost invariably get healing by first intention under antiseptic treatment, notwithstanding the subject, and almost invariably unfavorable and unclean surroundings. Healing by granulation is now the exception and not the rule.

AUSCULTATION OF THE LUNGS UP TO DATE.*

By J. H. TYNDALE, M. D.,
LINCOLN, NEB.

The time has come when it is necessary to break loose from the petrifactions of custom and tradition that still cling around physical diagnosis as applied to the lungs and heart. In this paper I shall confine myself to terms employed in auscultating the respiratory organs.

The sounds heard in the lung lie within the musical scale—somewhere within the ten octaves recognized by the human ear. The C of the bass clef has thirty-two vibrations, while the C eleven octaves higher has 33,768 to the second. This constitutes the pitch of a given tone or sound. Text-books on physical diagnosis (faithfully copied from one generation to another) tell us to listen to:

1. *Intensity.*—This represents the amplitude of sound, or, in other words, loudness. It is supposed to be the equivalent of "volume" in music. In ascertaining conditions in the lung it is of no value whatever.

2. *Quality.*—The books tell us that by quality we "tell one instrument from another,"—a bronchus from a cavity, for instance. This statement is absolutely false, as will be shown later on.

3. *Pitch.*—This is considered secondary to rales and other accidental manifestations. As a matter of fact, it is by pitch alone that any definite conclusions can be arrived at.

4. *Duration of Sound.*—Nothing so clearly shows the prevalent confusion of ideas as to make this element of pitch a separate feature.

5. *Rhythm.*—Rhythm is dwelt upon in the text-books as one of the elements of sound itself, instead of as part of the mechanical execution (the phrasing) of tones or sounds.

6. *Rales* of sixteen different kinds and dimensions. The importance attached to secretions accompanying certain pathological conditions, of which they form no part whatever, is a hoary tradition. The actual pathological changes to be ascertained by auscultation are made more difficult to ascertain by giving fancy names to accidental secretions.

Let us now see what will result if we reduce sounds in the lung to a musical basis, where they belong. Instead of dealing with twenty-seven different and entirely unrelated designations, we have only four facts or designations to consider. These are: The fundamental *tone* and its *pitch*, representing the musical sound itself, and *rhythm* and *tempo*, representing the manner, the method, in which these tones are presented to our ear. In other words, tone and its pitch represent the character of the sound, whether by voice, instrument or respiration; rhythm and tempo the mechanical part—the technical execution.

* Read by title before Nebraska State Medical Society, Lincoln, May 21, 1896.

Digitized by Google

1. *Tonality*—or the key-note. Of these there are only two in the lung—pulmonary and bronchial, or, if you choose, vesicular and tubular. These are the *fundamental tones.* These two sounds each have their own true pitch. Let me be understood to say, however, that this true pitch is somewhat individual, and therefore not as fixed as a musical tone. But a tone is not known by its "quality." Quality is that element which gives tones absolute individuality, and results from overtones heard to re-enforce the fundamental tones. There can be no valid objection to giving the observer's individual impression of a particular quality of bronchial or pulmonary manifestation. But "quality" is not a synonym for tone.

2. *Pitch.*—Both the pulmonary and bronchial tone have a certain recognizable pitch, which, as previously stated, is somewhat individual. Thus the normal pitch of one person may be raised or lowered a semitone as compared to that of another. For that particular individual this constitutes his key-note pitch. Now musical sound is the result of vibrations which occur at *regular intervals* and with a *sufficient rapidity of succession.* When these sound waves move along together in unison, though of different size, we speak of a "related pitch." This is applicable to pitch in auscultation. The tone still *harmonizes* with that heard in normal portions of the lung, where the true pitch is found. Broncho-vesicular breathing, for instance, is an "unrelated pulmonary pitch," but it is still in the pulmonary key until there occurs an absolute change of key—of the pulmonary tonality to that of bronchial. That whatever is heard should be referred to the pulmonary respiration until it has changed to clearly bronchial is justified by the well-known fact that vesicular is the dominating breathing, while the bronchial is always present, but drowned by its more potent rival. In other words, tubular (bronchial) breathing is heard only in the absence of the vesicular.

Now, having made ourselves acquainted with tonality and pitch—with the music as produced in the lung tissue—let us look at its execution or technic. This technic simply consists of rhythm and tempo.

3. *Rhythm.*—Rhythm is the regular recurrence of accents; the characteristic of regular succession. It is punctuation. The rhythm of breathing in the normal condition of the lung is a regular succession of marked accents. It consists, as we all know, of inspiration, pause, and expiration —what in music would be called a three-part rhythm. The rhythm of respiration is a continuous movement (legato), while that of the heart is interrupted (staccato). A change from the continued to an interrupted rhythm marks the earliest beginnings of a pathological condition in the lung, both in infections and inflammations. An illustration of this is what is known under the puerile designation of "cog-wheel respiration."

4. *Tempo.*—Tempo is nothing more nor less than the speed of the rhythm. The normal tempo of breathing is from 16 to 18 respirations to the minute—about one to every four seconds. Changes in tempo are quite permissible in vocal and instrumental music, and it is not considered a fault, provided rhythm is not tampered with in slowing or accelerating the tempo. On the same principle, hurried or much retarded respiration is of prognostic value only when it breaks up the rhythmical sequence of the respiratory movement. The same holds true of the heart's action.

The importance attached to rales or rhonchi is another one of those sacred traditions for which Esculapius and various other gentlemen, now deceased, are to be held responsible. Transudations and secretions accompanying functional or organic disease of the lung—whether serum, mucus, pus, or blood—are not the pathological condition itself, nor do they give us any definite clue to the same. Their expectoration or absorption still leaves the condition to be ascertained by tone, pitch, rhythm, and tempo—four designations, as against twenty-seven of the old nomenclature. For these side issues of secretion I propose the name of associated or concomitant secretions and transudations.

In conclusion, I beg leave to submit three maxims, to which your close attention is requested:

1. Changes in the mechanical act of respiration —changes of tempo and rhythm—when temporary, are indicative of functional disturbance only. These disturbances are nearly always those of innervation, though the source may be *pressure* —in other words, *mechanical interference.*

2. Disease first disturbs the mechanism of respiration—tempo and rhythm—before it manifests itself in changes of pitch and tonality. The intensity of an infectious or inflammatory invasion may be gauged by the skipping of the mechanism and almost immediate changes of pitch. To be sure of accomplished organic changes, there must always be present a *permanent* and *persistent* change of pitch, merging into a change of tonality.

3. While in progressive inflammatory or infectious disease of the lung changes in tempo and rhythm are invariably followed by changes in pitch, and these again by changes in tone—namely, from the pulmonary to the bronchial—exactly the reverse occurs in the progress toward recovery. Tone changes first, pitch next, and rhythm and tempo take their own time in finding their level.

Chronic nasal catarrh, when there is a dripping back into the throat, finds a ready cure in hydrastis, triturated with 1 per cent sugar of milk, four doses a day.

Digitized by Google

Selected Article.

A CASE OF DILATATION OF THE STOMACH TREATED BY AN OPERATION BELIEVED TO BE NEW.

BY WILLIAM EWART, M. D., CANTAB., F. R. C. P. LOND.,
PHYSICIAN TO ST. GEORGE'S HOSPITAL,
AND
WILLIAM H. BENNETT, F. R. C. S. ENG.,
SURGEON TO ST. GEORGE'S HOSPITAL.

The time which has elapsed since the date of the operation adopted in the following case is not yet sufficient to justify any positive conclusion as to the permanence of the benefit derived by the patient. We, however, feel justified in recording the case, as the results obtained up to the present time (March, 1896) are so good that we believe the treatment to be worthy of consideration and trial at the hands of others in appropriate cases of gastric dilatation.

A man aged thirty-four years, a native of South Australia, was admitted into St. George's Hospital under the care of Dr. Ewart on Nov. 10th, 1895, with the following history: He had always been in perfect health until about eight years previously, when he was laid up in Adelaide with typhoid fever, from which he recovered in nine weeks. Almost immediately afterwards he had an attack of rheumatic fever, which incapacitated him for four months or thereabouts. Soon after recovering from the rheumatic fever he began to suffer from "spasms" in the stomach, especially after food. Since that time he had been a constant sufferer from painful dyspepsia, which at times had been so bad as to cause him to take to his bed. For four or five years he had suffered from obstinate constipation and great flatulent distension with severe pain almost continually. In the summer of 1894 these symptoms became so severe that all attempts at following his occupation (that of a carpenter) had to be relinquished. Having been treated for several years in New York and other places in the United States for relief of his symptoms without effect he came to London and was admitted to another hospital as "a case of dilated stomach," which was treated by daily washing, etc. He remained in the hospital for six weeks, and since leaving it he had washed out his stomach assiduously every day with very partial relief. Before leaving that hospital the question of operation was discussed, but nothing further was done. For three or four years there had been progressive loss of flesh. On admission into St. George's Hospital the patient was found to be greatly emaciated, the features were sharp and the cheeks hollow, there was good energy of voice and manner, and the appearance generally was rather that of imperfect nutrition than of disease. The chief symptoms complained of were an extreme constant dragging pain in the right abdominal regions especially when standing: pain at the epigastrium after food, which sometimes extended to the left cardiac area; habitual obstinate constipation; and attacks of anorexia with persistent and almost intolerable flatulence. On examination the organs were found to be normal with the exception of the stomach, which was greatly enlarged (see Fig. 3), and gave a gross splashing sound on percussion which the patient could also himself elicit by shaking his body. For a few days he was kept in bed and treated for the dyspeptic symptoms with complete relief to the dyspepsia and also to the constipation; on being allowed to get up the symptoms, however returned as before. The patient's misery was so great that he begged urgently for some relief by operation if such were possible, and stated that he was prepared to run any risk as his present condition was unbearable, and that the washings and stomach "toilet" which he had for a time practiced were not only almost impracticable for him to carry out but also gave only partial relief. A consultation was therefore held between Dr. Ewart and Mr. Bennett, at which it was decided to carry out a method which it was thought would afford the necessary result. On Nov. 26th (after a consultation with his surgical colleagues) Mr. Bennett performed the following operation: The abdomen having been opened by a median incision about five inches long, commencing above at a point an inch below the ensiform appendix, the stomach was thoroughly examined by the hand introduced through the wound. No adhesions were detected and the pylorus was normal. The viscus was then drawn out of the abdomen and laid upon the parietes, where it presented a large balloon-like bag distended with gas. A fold on the anterior aspect of the stomach was then turned in by the fingers of an assistant. The length of this fold, which followed in direction the long axis of the stomach, was about twelve inches, its greatest depth being three inches. The inverted portion was, therefore, about six inches in width at its widest part and twelve inches long (Fig. 1). Whilst this fold was kept involuted by the assistant's fingers the peritoneal surfaces on the opposite sides of its base were brought together by numerous sutures made to transfix the peritoneal and muscular coats in the manner indicated in Figs. 1 and 4, the fingers of the assistant being gradually withdrawn from the fold before the tightening up of the final stitches. After the stitches had all been fastened off the size of the stomach was greatly lessened, the shape of the viscus then being that shown in Fig. 2. Mr. Bennett had intended to make a secondary small involution at the great end of the stomach (Fig. 2, B) to prevent the otherwise inevitable dependent tendency of that part, but as the patient was in a very unsatisfactory condition generally it was thought wiser to be content with what had already been done. The altered viscus was then returned into the abdomen, the wound in the parietes being closed by fish-gut sutures in the usual way.

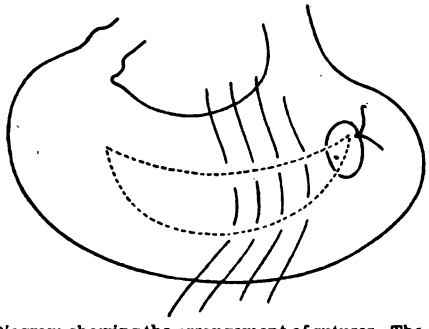


FIG. 1.—Diagram showing the arrangement of sutures. The dotted lines indicate the extent and shape of the inverted area of the stomach wall.

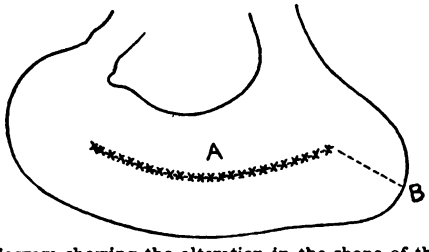


FIG. 2.—Diagram showing the alteration in the shape of the stomach effected by the operation. A, the sutured edges of the base of the inverted fold. The dotted line, B, indicates the position of the secondary involution for obviating the dependent tendency of the great end of the stomach.

Progress of the case.—The patient vomited once soon after the operation. As soon as he was fully conscious he was frequently given small quantities of water, as hot as could be tolerated, by the mouth. At 6:30 P. M. (the operation having been completed at 3:15) Mr. Bennett, as the collapse was still marked, himself saw administered an egg beaten up with an ounce of brandy. This having been retained with comfort further nourishment by the mouth in the shape of brandy and meat essence was given throughout the night when the patient, who slept a good deal, was awake, thirst when complained of being assuaged with hot water in small quantities frequently given. On Nov. 27th the patient, having had a very fair night, was a little sick during the morning, but without straining. He took nourishment well—viz., two eggs, extra strong beef-tea, meat essence, and two pints of milk. (This dietary was continued until Dec. 1st, when chicken and custard were added; milk-pudding was also added on the 8th, greens on the 18th, and he was ordered a mutton chop on Jan. 18th, 1896.) On Nov. 29th the wound was inspected as the dressings were uncomfortable. It was quite healthy in appearance. There had been no more sickness and hardly any pain except a slight dragging pain on deep breathing. The pulse and temperature were normal. On Dec. 1st there had been much improvement. Food was taken without any difficulty,

Digitized by Google

there was no feeling of sickness or pain, the bowels were open, the pulse was 72, full and strong, and the temperature, which was slightly sub-normal before the operation, had risen to about normal with occasionally a few tenths of a degree of pyrexia in the evening. On the 6th all the stitches were removed from the abdominal wound, which had quite healed. There was no discomfort of any kind and the patient felt very well and was placed on a more substantial diet. The bowels were, however, a little distended. On the 8th he got up for two and a half hours. Some pain was complained of in the left thigh along the saphenous vein, which was varicosed. There was no rise of temperature. On the 10th there was marked tenderness along the saphenous vein of the left thigh; there was no sign of phlebitis. (Upon inquiry it appears that the patient had an operation performed for varicose veins in New York, the veins "being pinned"; since that operation he has been subject at times to great pain in the veins.) All stomach trouble had disappeared; there was neither pain nor discomfort after food. The pain in the limb, which was kept at rest, was disappearing. On the 18th all pain in the limb had subsided and the patient felt very well. On the 23d he complained of a single sensation of dragging at the abdominal scar on standing up; otherwise he was quite well. On the 27th the patient was allowed to remain up permanently; but he still had slight dragging pain. Up till Jan. 14th there was practically nothing further to note. The patient had occasionally complained of some very slight discomfort after meals and also said that he had noticed a suggestion of the old splash; but on examination this could not be elicited either by gentle tapping of the anterior abdominal wall as previously or even by moderate succession. The size of the stomach was carefully determined by auscultatory percussion on Dec. 16th, and the tympanitic area was found to be considerably reduced (Fig. 3). A further tracing taken a fortnight later gave practically the same result. Since the operation no medicine was administered, with the exception of some acid glycerine of pepsin, an occasional aperient pill, and an occasional carminative dose. For several weeks past his weight had remained stationary; he had regained 2 lbs. since the original loss mentioned above. He was still somewhat thin and hollow-cheeked, but was greatly improved in aspect, and his general nutrition was much better than before operation. The patient left the hospital at the end of January, 1896, greatly improved in all respects. The stomach resonance remained the same as in the diagram (Fig. 3); there was no constipa-

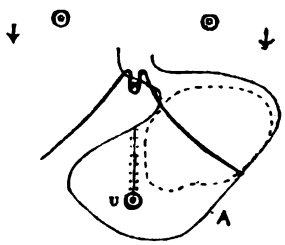


FIG. 3.—Tracing showing the tympanitic areas found by auscultatory percussion before and after the operation (from a photograph taken by Mr. Powell). A, tracing obtained prior to the operation. The dotted line shows the reduced area of resonance after the operation. U, umbilicus, above which is the line of incision. X, the ensiform appendix. The right and left nipples are also shown, and the arrows indicate the position of the mid-axillary line.

tion and no dyspeptic symptoms were occurring; the only discomfort complained of was an occasional slight dragging about the abdominal scar, but this was gradually diminishing and was entirely relieved by the use of a light abdominal belt with which the patient had been provided.

REMARKS BY MR. BENNETT.—It cannot be denied that dilatation of the stomach unassociated with pyloric obstruction may be productive of the greatest misery to the patient and may even in some cases lead to a condition bordering upon starvation. In the majority of instances, it is true, life may be continued with varying degrees of pain or discomfort, provided that the stomach be frequently washed out and the necessary restrictions in diet and in the manner of living be rigidly observed. At the same time it must be admitted that the frequent washings and details generally of the stomach "toilet" in these cases are at the best distressful and often revolting to susceptible subjects, by whom the treatment is carried out reluctantly, and as often as not solely because of the fear of the pain and vomiting which may follow upon its omission. In certain classes it is obvious that the treatment referred to is practically impossible, and even with the wealthy and otherwise well circumstanced the treatment is often almost intolerable and has been the determining factor in the serious contemplation of self-destruction. Certain cases have from time to time been recorded in which the separation of adhesions about the stomach after abdominal section has been followed by complete relief of the symptoms complained of in dilatation, and in which a shrinking in the abnormally large viscus has come about. In cases in which no adhesions exist it is clear that nothing short of some actual diminution in the size of the stomach by operative measures can be relied upon to give practical relief. The obvious proceeding which first suggests itself is the removal of a portion of the whole thickness of the stomach of a sufficient size to produce the desired decrease in capacity, but this operation is unduly severe and could hardly be free from certain risks when the thickness and vascularity of the stomach walls are considered on the one hand, and the very extensive area which would require excision on the other hand in these cases of very large stomachs. After consideration, therefore, I came to the conclusion that the necessary diminution in the stomach capacity could be brought about by doubling in a portion of the walls upon the lines indicated in the description of the case now recorded. This operation is clearly much less severe than any excision of a portion of the stomach could be, and, moreover, although the stomach is itself decreased in size the whole of the mucous membrane is left untouched, which must be distinctly advantageous for purposes of digestion. After a discussion of the subject with my colleague, Dr. Ewart, it was determined to test the treatment in the next case of a sufficiently severe nature which came under observation, as the risk appeared to hardly exceed that of mere abdominal section, which in these times cannot be considered as serious. The only theoretical objection which could be urged against the proceeding appears to be a possibility that the large infolded flap of mucous membrane might during the contraction of the stomach form an obstructive mass in the pyloric region and so prevent the proper outflow of the contents of the stomach. This objection, however, has no practical value if in the making of the fold care be taken first to avoid encroaching too closely upon the pylorus, and, secondly, to see that the fold follows accurately the long axis of the stomach. As is often the case in an operation performed for the first time on the living subject, there are certain technical defects in the proceeding adopted in the present case which I shall in the future endeavor to avoid, although they in no sense appear to have invalidated the satisfactory result of the treatment up till now in this patient. The defects to which I refer are two in number; the first is the unduly dependent position in which the great end of the stomach remains, which is obviously undesirable, but can easily be rectified in another case either by continuing the main involution along to the extreme cardiac edge of the viscus, or, as I had intended to do in the present case had circumstances allowed, by making a small secondary involution at the situation marked B in Fig. 2. The second defect is one which may or may not be of importance, but I conceive that it may possibly interfere with the permanence of the benefit derived; it can, however, be easily obviated in the future and in no way affects the principle of the operation. It will be seen by reference to A, Fig. 4, that the line of apposi-

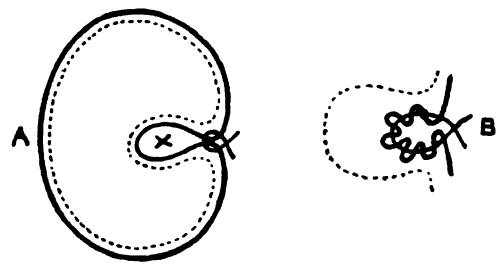


FIG. 4.—Diagram of section across the long axis of the stomach. A shows approximation of edges of base of involuted fold, X, produced by the operation performed in the case now recorded. B, modification of method of passing sutures referred to in Mr. Bennett's remarks. The dotted line indicates mucous membrane and submucous tissue; the continuous line the peritoneal and muscular coats.

tion of the opposite peritoneal edges produced by sutures introduced in the manner described is rather narrow; it is therefore conceivable that the line of union, as it is so thin, may in course of time stretch and so lead to a recurrence of the dilatation. The future history of the case will, of course,

Digitized by Google

settle the point definitely. In the meantime, should another case present itself which is appropriate for operation I shall avoid this possible defect by passing the sutures by threading in and out across the area intended to be turned in, after the manner shown in Fig. 5, no suture being fastened until all have been introduced. The tightening up of stitches each arranged in this purse-string-like fashion will produce an extensive puckering up of the included peritoneal surface in the way indicated in Fig. 4, B, the resulting union being so complicated and extensive that stretching must be practically out of the question. This modification of the operation, although it appears at first sight to add complication to the plan, in reality makes it more easy, since no involution by the fingers of an assistant is necessary, the stitches being merely threaded in and out across the portion of the stomach it is proposed to invert. The extent of the fold included in the stitches can also in this way be much more accurately gauged than when the fold is turned in by the fingers, as its extent must then be in a certain degree doubtful. As will be gathered from the notes of the case now recorded the relief afforded by the operation was remarkable, and, so far as can be judged from the present condition of the patient, there seems to be no reason why it should not be permanent in spite of the apparent possible defects in the technical results of the proceeding to which I have alluded. A noteworthy point in the case is the singular tolerance shown by the stomach for nourishment given by the mouth almost immediately after the operation. A considerable experience of operations upon the stomach confirms me in the conviction, which I have frequently expressed, that in

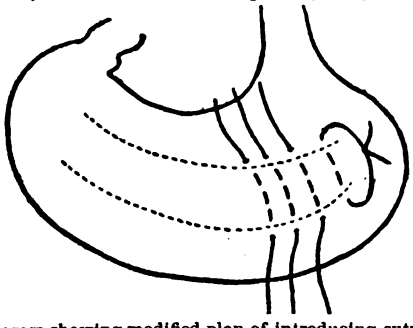


Fig. 5.—Diagram showing modified plan of introducing sutures for the purpose of obtaining larger area of adhesion of the sides of the infolded flap. The result of this modification is seen in Fig, 4, B.

cases of operation involving this viscus nourishment by the natural passage cannot be given too soon after the patient has recovered sufficiently from the anæsthetic to be able to swallow. It is further, I think, undeniable that the surest means for counteracting the shock from which these patients succumb when they die soon after operation, is to give at once, in small quantities at a time but freely, water as hot as it can be borne, and then as soon as the stomach has learnt to tolerate water only to begin the administration of liquid or jelly nourishment by the mouth. This plan I have myself always followed, and it is mainly to that practice that I attribute the fact that every patient upon whom I have up to the present time performed operations involving the stomach—e. g., gastro-jejunostomy and suture of perforating gastric ulcer—has recovered, although in two of the cases the patients were at the end of the operation apparently in an utterly hopeless condition. The results of the case described in this communication are in my opinion so good that I shall certainly perform the operation in any other appropriate case which may fall into my hands. The principle of the treatment is, I submit, sound, and the risk entailed in carrying it out cannot with ordinary care be great. It must not be for one moment inferred that the operation is suggested as a routine treatment for gastric dilatation; but for extreme cases in which treatment by the stomach "toilet" is either impracticable, intolerable, or ineffective the radical method adopted in this case may, I believe, be considered a rational proceeding, and may be undertaken by any competent surgeon without subjecting the patient to risks which are out of proportion to the amount of benefit likely to be derived from the operation.

Note.—After leaving the hospital the patient resumed his work as a carpenter. Recently (June 17th) he has reported himself complaining of some dyspeptic symptoms. There is a modified stomach splash and the area of resonance is rather larger than that shown in Fig. 3. The sequal of the case will be published later.—*The Lancet.*

New Application of the Röntgen Ray—Fluorescent Screen.—An important advance in the application of the Röntgen ray to medicine is described in the *Semaine Medicale* for July 1. Instead of taking photographs, it is now possible to look directly into the body and see the skeleton with our own eyes. This is accomplished by means of a screen made by gluing a piece of cardboard one-half mm. thick on a pane of glass. A square piece is then cut out of the center, 10x25 cm., and the space thus left on the glass is filled with the finely pulverized chemicals which we know become fluorescent under the Röntgen ray; double cyanid of potassium and platinum, or double cyanid of barium and platinum. This is covered with another piece of cardboard the same size as the first, enclosing the chemicals. If this screen is held at the cathode end of a Crookes' tube concealed in a pasteboard box or covered with a cloth, the part of the frame that holds the chemicals is instantly illuminated, and a hand interposed between the illuminated frame and the invisible Crookes' tube becomes transparent, so that nothing but the bones can be seen. Promising results have already been secured by Buka, Röntgen, Salvioli, Lewy, Grunmarch, du Bois-Reymond, etc., who have distinguished the skeleton and organs throughout the body and diagnosed several cases of arterio-sclerosis, etc., with amazing accuracy. Becher, of Berlin, adds the suggestion that lime water injected into the stomach or intestines or the introduction of air prevents the passage of the Röntgen ray.—*Deutsche Med. Woch.*, July 2.

Five Months Fetus Developed in the Abdomen of a Young Man.—A strange case was reported at the meeting of the Académie de Médicine, May 5. A young man was operated upon for what was supposed to be a large abdominal tumor. It proved, however, to be a dermoid cyst, containing a female fetus as large as is usual at five months. The ovum in the cyst had probably lain latent until puberty or some traumatism had started it to grow. The young man did not long survive the operation, and died ignorant of the existence of a little sister in his supposed tumor.

American Tenacity.—M. Patenotre, the French ambassador, went crabbing the other day at Cape May. He soon caught a crab, and not being familiar with the creature he grasped it with his left hand. Then the crab promptly caught him. The ambassador was evidently both pained and surprised. He instinctively grasped it with his right hand, and the crab in turn seized his right hand. Thereupon the captain of the yacht went to the rescue of M. Patenotre, who remarked: "Ze tenacity of ze creature is so very much Americaine!"—*Journal of the American Medical Association.*

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

George H. Simmons, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance, ... $2 00
Single copies 20

Address: Western Medical Review, Lincoln, Nebraska.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, AUGUST 15, 1896.

WHAT ABOUT THERAPEUTICS?

In looking over the lists of papers read, and to be read, before the different medical societies, one wonders if therapeutics is a thing of the past. Once in a great while a paper is read on the use of some drug, and occasionally one reads of a method of curing disease with medicines. But there seems to be practically no place given now for the scientific study of medicine from a therapeutic standpoint. Has the knife and the hypodermic syringe taken the place of all pills and potions? Have we advanced to such a point that there is no room for further study in drug action? Or are we leaving it to the various pharmaceutical houses to do our investigating for us and then accept their dictum as our authority? This is evidently an age of pessimism in regard to drugs, but is there not some danger that we may allow this pessimism to go too far?

MISSOURI IN LINE.

At last Missouri, so full of good, bad, and indifferent medical colleges, has apparently taken a tumble unto herself and is going to reform her medical colleges. And heaven knows she needs to. What with St. Louis, Kansas City, St. Joseph, not to mention Joplin and several other villages that have had medical colleges, she certainly has inflicted suffering humanity enough. But now she proposes a change, a change which, if carried out, will be the death of some of her schools, if we are not mistaken, but will certainly raise the standard of the others. The Missouri State Board of Health, at its meeting in Kansas City last month, decided that hereafter all the medical colleges in Missouri must demand of all students a certificate from the state superintendent of public instruction showing that they are qualified to commence the study of medicine. Applicants for matriculation will have to submit their diplomas to the state superintendent, or, in the absence of satisfactory evidence of graduation at a high school or college, pass an equivalent examination before the superintendent or his assistants. The obligatory standard of high schools and colleges required by the State Board of Health for matriculation at a medical college is the study of algebra up to quadratics; Latin, equivalent to one year's study of Latin in a public high school, and of elementary physics. Whether or not a college or high school comes up to this standard is to be determined by the state superintendent of public instruction. Prospective medical students will be notified to appear before the state superintendent and his assistants on a day prior to the opening of the medical colleges. The fee charged the applicant will be $5, which will go to the State Board of Health. The profession of Missouri is to be congratulated on having a board which appreciates its duty and does it. It is to be hoped that the profession, the medical schools, and the people of the state will indorse this action and help to make it a success.

A SPECIALIST WANTED.

The progress of the times, as far as medicine is concerned, has made it necessary that the physician, if he desires to be considered up to date, shall be a man of immense knowledge, so immense, in fact, that few, if any, can attain to the ideal needed. That there is a limit to the amount of knowledge a man may attain may be doubted, theoretically, but that there is a practical limit no one will deny. Some of us find that limit easily reached, or rather we find the ability to go beyond a certain limit often lacking; but there are a few who have, apparently, the ability to obtain all knowledge. The latter we leave out of our calculations.

When we stop to consider in what branches of medicine we have made the most progress, we are forced to acknowledge that it is that department in which the microscope plays the most part. The microscopical study of the pathologist and bacteriologist has opened up to our view vistas that were unthought of before, and these vistas have shown us things that were undreamed of in our philosophy. In these vistas we see the cause of diseases, which has put us in line for new methods of cure, yet imperfect, to be sure, but at

Digitized by Google

the same time methods that make us feel that the time is not far off when we shall have a cure for many diseases heretofore considered incurable. But it is especially in the methods of diagnosis, in the precision and accuracy with which we can say this is or is not the trouble, that the microscope has helped and is helping us. By the aid of the microscope we are able to tell that it is that fell destroyer of humanity — tuberculosis — that is dragging our patient down long before the stethoscope can detect a sound to indicate the trouble that is insidiously sapping the life blood. And especially is this so if what Dr. Ephraim Cutter says is true, that consumption can be detected in the blood before there is any appreciable lesion in the lungs. By the aid of the microscope we examine the urine and discover diseases of the kidneys, and by the same instrument we examine the blood and discover that we have malarial fever, when we suspected typhoid. That simple case of follicular tonsilitis which the doctor at first called diphtheria, and which frightened the parents and friends of the patient, because they believed the doctor, would have been called by its true name if the physician had used his microscope, provided he had been a bacteriologist. And this brings us to the point that the average physician finds it impossible to keep up with all the branches of scientific medicine, unless he is one of the exceptional kind which we have left out of our calculation.

To be a thorough bacteriologist and pathologist, capable of examining intelligently the blood, urine, and pathological specimens, one must be an expert microscopist. To be an expert microscopist one must have more time to put into the study of microscopy than has the average physician, whether he be of the country variety or he who enjoys the luxury of a city practice. Many of us dabble with the microscope, and try to imagine that we can detect Laveran's body, when that animal would no more think of inhabiting the blood which we are examining than it would think of living at the top of Pike's Peak. We try to keep up with all the branches, and, alas! are liable to succeed in none.

What we need, then, is a specialist in the use of the microscope as applied to bacteriology, pathology, and blood morphology. Such a specialist must be what he claims to be, and nothing more. He must not be a practicing physician, for evident reasons. He must be a consultant only, and he must be well paid, just the same as is the ordinary consultant. One such should be located in every county, and in every city, where he could be easily reached. If things were as they should be, this specialist would be paid by the state, county, or city. But as they are not, and are not likely to be so long as party politics are as they are, some other method of remuneration will be adopted. For this consultant, this specialist, will soon be a necessity and will have to be recognized as such.

DERMATITIS FROM THE RÖNTGEN RAYS.

That the action of the Röntgen ray will produce alopecia has, we believe, been reported, but that it will produce a severe dermatitis, and that without causing pain or any symptoms to indicate trouble, we have failed to find mentioned in any literature on the subject. The members of the Nebraska State Medical Society who were in attendance at the annual meeting last May, in Lincoln, and who attended the lecture by Professor Brace at the university on the X ray and its practical application, will remember the patient who had received a gunshot wound in the head and who was the subject of one of the experiments. Attempts were made to locate the bullet, but resulted in failure. As a sequence of this experiment, however, the patient suffered the entire loss of hair on the side of the head which was exposed to the rays. It has as yet failed to reappear.

The other case which we desire to report is that of an attorney of this city who was badly maltreated by footpads last January. The result of the ill-usage, besides many bad bruises otherwise, was an injury to the shoulder which did not improve as it was expected to do. It was finally decided to obtain a skiagraph of the shoulder joint, and this was attempted about ten weeks ago. The seance lasted two hours and a half. During the sitting the patient complained of no pain, no burning sensation, and no inconvenience whatever, except the tiresomeness of being so long in one position. In about a week afterwards he began to feel a slight burning sensation, and on examining the back of his shoulder where the rays had been concentrated he noticed a slight redness, an erythema. This gradually increased in intensity, so that in four or five days afterwards he consulted his physician. That gentleman informs us that by that time the dermatitis had resulted in such profound trophic changes that in appearance the wound looked like a severe burn of the second degree, covering a space as large as

Digitized by Google

two hands. For three weeks it seemed almost impossible to control the inflammatory action that was set up, and now, two months after it was first noticed, there is an irregular space, three by four inches in extent, not yet covered by skin.

The strange thing about this case is the fact that there was no indication of trouble at the time the patient was subjected to the rays, and there was no suspicion that any injury would result till at least a week afterwards. The extreme length of time the seance lasted may have been, and probably was, the cause of the dermatitis, but at the same time the conclusion must be reached that there is a subtle influence or action in the Röntgen rays that is not yet appreciated.

We expect next month to publish a full account of the brain case referred to at the beginning of this article, by the physicians having charge of the case, not in its relation to the X ray, but as a curious case of brain injury.

Notes and News.

Dr. J. B. Jack has removed from Nebraska City to Brownville, Nebraska.

Dr. C. A. Hoffman is now located at Stromsburg, Nebraska, having removed there from Omaha.

Dr. I. N. Love, editor of the *Medical Mirror*, has resigned from the faculty of the Marion-Sims Medical College.

At the last examination of candidates for license to practice medicine in Massachusetts, 25 out of 198 were rejected.

The Ohio Board of Medical Examiners has rejected one-third of the midwives who have applied for a license to practice in the state.

There is no antagonist to chloroform so valuable as strychnine given in full doses, and on the slightest sign of cardiac or respiratory failure.

A new epidemic is now raging in Paris. It is the mumps. The remarkable part of it is that adults rather than the young are the sufferers.

Dr. M. Allen Starr, of New York, was elected president of the American Necrological Association at its meeting recently held in Philadelphia.

Dr. Edgar P. Cook, of Mendota, Illinois, has been appointed a member of the Illinois State Board of Health, in place of Dr. Wm. E. Quine, who resigned.

Dr. Hans von Hebra, a son of the great dermatologist, has been appointed to a full professorship in the University of Vienna. Professor Hebra is well known as a privat-docent.

This is a Fact.—A physician recently recommended that a two months old boy ought to be circumcised. The fond mother, in all seriousness, protested, "Oh, doctor, could he not be vaccinated there instead? I hear it removes birth marks."

Small-Pox is still in existence in Gloucester, England. Since the beginning of the present epidemic about two thousand cases have occurred. And yet the anti-vaccinationists are unsatisfied. The result of the statistical inquiry into this epidemic is one of the strongest arguments in favor of vaccination that has been produced in the century of Jennerism.

Dr. James G. Kiernan, of Chicago, who for ten years has been editor of the *Medical Standard*, has resigned that position, "in consequence," he says, over his own signature, "of the intrusion of nostrum advertisements by the publishers on the *Medical Standard*, and the attempt to convert this journal into a write-up organ for nostrums and allied performances." Dr. Kiernan ought to be congratulated in having the courage of his convictions.

At the last meeting of the Nebraska State Medical Society a resolution was passed authorizing the appointment of a special committee on medical legislation, to act with a like committee from the state homeopathic and eclectic societies. The president of the Nebraska State Medical Society, Dr. Haldeman, has appointed the following gentlemen on this special committee: Dr. J. R. Haggard, Lincoln; Dr. W. R. Lavender, Omaha; Dr. J. V. Beghtol, Friend; Dr. O. Grothan, St. Paul, and Dr. J. E. Summers, Jr., Omaha.

At the meeting of the American Medical Association, at Atlanta, the trustees were requested to get an expression of the members in reference to what should be the permanent location of the *Journal*, so that arrangements could be made looking forward to buying property for the use of the *Journal* at the place selected by the majority. The result of the ballot has just been announced. Three thousand and sixty-one ballots out of 5,265 were sent in. Chicago was far ahead of all others, having 2,128. Washington came next with 810, Philadelphia 48, New York 24, St. Louis 22. This ought to settle the matter for all time, and it probably has.

The London *Lancet* recently appointed a commission to investigate the value and reliability of the different kinds of antitoxin on the market in Great Britain. This was done because the results obtained in that country in the treatment of diphtheria were inferior to the reported results on the continent, and the investigation was to find out if the quality of the remedy was at fault. The results obtained showed that there was a wide difference in the several specimens exam-

Digitized by Google

ined, and few, if any, were reliable in strength. The question arises whether if such an investigation were made in this country like results would be obtained.

Dr. Daniel Lewis has been re-elected president of the New York State Board of Health.

Dr. Joseph M. Mathews, of Louisville, was recently re-elected president of the Kentucky State Board of Health. Dr. J. N. McCormack, of Bowling Green, was again chosen secretary.

Colorado State Board of Medical Examiners.—The Colorado State Board of Medical Examiners, July 7, granted licenses to practice to seventy-eight physicians, who presented their diplomas from reputable medical colleges. The annual election of officers of the board was then held, which resulted in the choice of T. J. Forham, M. D., of Rouse, as president, and T. A. Hughes, M. D., of Denver, for secretary and treasurer.

Elsewhere will be found a notice of the change of date of the meeting of the Mississippi Valley Medical Society, from October 20th to 23d, to September 15th to 18th. This latter date will conflict with the meeting of the Society of the Missouri Valley, this society meeting on the 17th of September. It is a blunder on the part of somebody that the dates of these two societies should be allowed to conflict, especially since the larger society meets in the place it does. There were quite a large number of physicians who were intending to be at both of these meetings, and we do not see why, when the Mississippi society were making the change, they could not have set the date one week before or after the time they did.

The Medical Practice Law in Pennsylvania.—The July number of the *University Medical Magazine* gives the above law in full, from which we make the following abstract:

The law creates a medical council, composed of the lieutenant governor, attorney general, secretary of state, the superintendent of public instruction, the president of the State Board of Health, and the presidents of the three State Boards of Medical Examiners. There are three State Boards of Medical Examiners, appointed by the governor, who makes his selection from the certified lists of the regular, homeopathic, and eclectic state medical societies. Each board consists of seven members, who must have been in practice in the state at least ten years before their appointment, and have been registered and in good standing during that time. Each member serves three years.

An applicant wishing to be licensed to practice medicine in the state makes application to the secretary of the council, at Harrisburg, presenting his credentials, and if these are satisfactory he is given permission to appear before either of the three boards he may select. The fee for the examination is $25, which is not returned, but if the applicant fails he has the privilege of taking the examination every six months for two years. The credentials which he is expected to provide must show that he is over twenty-one years of age, is of good moral character, has obtained a good general education, and has a diploma from a legally incorporated medical college of recognized standing.

Physicians licensed by boards of other states are licensed in Pennsylvania on filing their license, duly certified, together with proper affidavits showing the standard of the state certifying to be as high as that of Pennsylvania.

Having obtained permission from the council, he appears before the board of his choice. The examination is in writing and the questions and answers are filed away for five years for reference and for public inspection. The examination covers all the branches of medicine. If the applicant passes the examining board he is granted a certificate by the council. After obtaining the license to practice the applicant registers this before a prothonotary of the county in which he or she proposes to practice. The fee for this is $1. Practitioners registered before March 1st, 1894, are not interfered with by this act.

Correspondence.

"HOW IS THIS?"

Friend, Neb., August 10, 1896.

Editor Western Medical Review: In your last issue appeared an article entitled "How Is This?" which bears so directly on our medical law and the action of the board that I am constrained to write you on this subject and the points involved in the recognition of medical colleges. I do not write in defense of the action of the board, but hope that what I may say will assist at least in leading up to improved legislation in our medical laws. To say that the board has done right in every case where certificates have been granted or refused would be claiming too much. During the last five years friendly and even hostile criticism has occasionally appeared, yet this is the first time I have taken occasion to answer a criticism or explain an action of the board. I do so now believing that it will be of interest to your readers. The unbounded and almost unanimous support given the board by the profession of the state satisfies me that the work is good, considering the limited power possessed by the board under the present law. During the first and second year's work some complaints were made by persons who were not familiar with the scope of the law, that certificates were granted to persons who were graduates of colleges which should not be recognized. This grew out of the fact that many of the physicians practicing in the state when the present law went into effect were given certificates by virtue of legal registration under the old law, and not

Digitized by Google

on diplomas presented to the board. Happily, that class of cases has been disposed of. Many of them were extremely trying, requiring a nicety of decision and oftentimes a very liberal interpretation of the law. Applicants who now present themselves are graduates, a majority of whom present diplomas from colleges whose reputation and standing are so fixed that the duty of the board in passing upon them is a mere formal one. There are some presented from colleges that are not well known, not yet having attained a place among the recognized medical colleges of the country. In May of this year Dr. W. F. Stouder, a graduate of the Physio-Medical College of Indianapolis, Indiana, made application to the board for a certificate. The case was postponed one month in order to give the secretary time to make the usual investigation. By an examination of the Illinois State Board of Health report of 1894 it was found that the college referred to filled every requirement of our law. It gives three courses of lectures of six months each, no two of which are given in the same year. It has a full corps of professors and teaches all the branches that our law requires, including clinical instruction. If the facts set forth in its prospectus and the Illinois reports are true, then the college is entitled to recognition in this state under our law, whether Kentucky recognizes it or not. However, in order to obtain further evidence, our secretary wrote to the boards of Iowa and Missouri, asking each of them if said school or college was recognized by them as being in good standing. Replies came from both states stating that they recognized the college as in good standing. The authority of these boards was considered of considerable importance, as they work under laws more stringent than ours. On the facts as above presented the certificate was granted. We did not write to Kentucky, as it is impracticable to write to all the boards in the different states, much less to act in complete harmony with boards clothed with greater powers. We aim to act in harmony with other boards of good authority when it can be done under our law. Kentucky might consistently and legally refuse recognition to a college under its law which we could not under ours. Our law says that "The applicant shall be a graduate of a legally chartered medical college in good standing, said qualifications to be determined by the board." Then, instead of leaving the power in the hands of the board, it defines what the qualifications are, so that when any medical college legally chartered puts out a prospectus setting forth a fulfillment of all the requirements of our law, and by ex parte evidence shows that it is entitled to recognition, it seems to me that in the absence of facts showing that these claims are false and live only on paper, the board is bound by law to recognize it. This case, and many others which occur monthly, show the necessity of revising our medical law. When some of your readers learn that the board has granted a certificate to a graduate of some college which they think is not entitled to recognition, they feel like criticising the board, forgetting that critics are not clothed with responsibility, forgetting that their knowledge of he college is based on hearsay evidence or a preconceived notion, and further forgetting that the board is sworn to act in accordance with law and consequently must apply the letter and spirit of the law to each case. The board is clothed with a responsibility not only to the state, but the applicant as well. In order to avoid the difficulties which now surround us, the law should be remedied at the next session of the legislature. The board in some way should be given further power, so that it may examine each applicant as to his qualifications. It is true that some of our best colleges, or those classed as such, send out some poorly equipped graduates, while some of the poorer ones send out men well equipped for their work. Colleges do not make doctors; the doctor makes himself. The present law has been a step higher and is a vast improvement on the old one, but it is not yet complete.

The board has been greatly handicapped in its work by causes which are apparent to most of the profession. They may be removed by proper legislation. At the last session of the legislature the members of both houses were ready and willing to help us, and would have given us anything in reason we asked for, but they saw that we could not agree among ourselves and consequently let the matter go by default. This should not occur the coming winter. The committees from the different societies should agree on a just bill, and it would doubtless pass without difficulty.

What we need is an examination board, and there will then be no need of questioning the recognition of colleges. Each college will have an equal chance and each applicant can speak for himself.

Yours very truly, J. V. Beghtol.

Gold Preferred to Silver.—According to the San Francisco *Post*, silver even in the form of the nitrate salt is not in favor on the Pacific slope. The *Post* says: A young lady with a touch of tonsilitis was consulting the family physician.

"That is nothing serious," said he. "I'll touch it up with a little nitrate of silver and you will be all right."

The young lady looked a bit doubtful.

"Oh, it won't hurt," remarked the doctor, reassuringly.

"I wasn't thinking of that. Papa might object."

"Why, what possible objection can he have?"

"I heard him tell mamma the other evening that he was opposed to silver. Couldn't you use nitrate of gold? Silver is so common and cheap, you know, and I am sure papa wouldn't object then."

Digitized by Google

Society Proceedings.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION—CHANGE OF DATE.

St. Louis, July 30, 1896.

Editor Western Medical Review: The date of the meeting of the Mississippi Valley Medical Association has been changed to September 15th, 16th, 17th, 18th, in order to permit the members and their families to take the opportunity accorded by this change to make a pleasant tour through the Yellowstone Park, so justly celebrated as the wonderland of America.

Prominent resident members of our association in St. Paul and Minneapolis are formulating plans for the special Yellowstone Park excursion trip, to leave on the evening of September 18th, arriving in Mammoth Hot Springs, in the Yellowstone Park, about noon on the following Sunday, and devoting the following five days to the wonders of this remarkable region, returning to St. Paul Sunday, September 27th.

The cost of the trip, including all expenses west of St. Paul, will be announced in due season, but we are authorized to say that the figure will be a very favorable one, and we simply wish at this time to make the preliminary announcement of this most enjoyable feature of the St. Paul meeting, so as to give members the opportunity of making their plans in advance to join the party. It is desirable that there be a party of 100 or more, in order to obtain the benefit of the special train service in both directions.

It is urged that all members who desire to join the party should send their names to Dr. C. A. Wheaton, chairman of the committee of arrangements, St. Paul, at as early a date as possible. If you desire to read a paper before the meeting, please send to me the title at once.

Very truly yours, Hanau W. Loeb,
Secretary.

Omaha, Neb, August 1, 1896.

Editor Western Medical Review—Dear Sir: At a recent meeting of the Omaha Medical Society the following resolutions were passed:

"Whereas, The standard of medical requirements for graduation is everywhere advancing; that the states of Illinois, Iowa, and many others now only recognize the graduates of such colleges as require attendance upon a four years' course in medicine;

"Whereas, The medical colleges of Nebraska have now advanced to the four-year curriculum, while under our statutes our state continues to license the graduates of the three-year schools:

"*Resolved*, That it is the opinion of the members of this society that our medical law should be changed to conform to that in the states mentioned, viz., that attendance upon and graduation from a medical college requiring four courses of lectures as a requisite to a license to practice in Nebraska, and that at the coming election we agree, individually and collectively, to support for legislative positions only such candidates from this district who promise hearty support of the proposed change, and that we will work personally and with our clientage in opposition to every candidate who will not promise such support of our interests, over his own signature.

"*Resolved, further*, That a printed copy of these resolutions be sent to every local society of regular physicians in the state, with a letter strongly urging personal conferences on the part of every physician in the state with his home candidates for legislative office, and that the expense of the printing and distribution of these resolutions shall be borne by this society."

Henry B. Wilson, *Secretary.*

Gage County Medical Society.—This society held its regular quarterly meeting at Beatrice, Friday, July 24. The meeting was a very interesting and profitable one and was well attended. The following papers were read: "How Shall We Practice Medicine?" Dr. J. Q. Gumaer, Liberty; "Cholera Infantum," Dr. R. S. Jeffries, Blue Springs; "Treatment of Hernia," Dr. C. A. Bradley, Beatrice; "The 'X' Rays," Dr. A. V. Robinson, Beatrice; "Corneal Ulceration," Dr. Bullard, Pawnee. The following officers were elected: I. N. Pickett, president, Odell; S. E. Yoder, vice president, Wymore; W. J. Hams, treasurer, Beatrice; R. S. Albright, secretary, Beatrice.

Iowa State Association of Railway Surgeons.—The third annual meeting of the Iowa State Association of Railway Surgeons will be held at Marshalltown, Iowa, October 15th and 16th, 1896. The following members are chairmen of their respective committees: Arrangements, H. L. Getz, Marshalltown; transportation, D. S. Fairchild, Clinton; judicial, J. N. Warren, Sioux City.

It is now quite probable that one-half rates will be made by all railroads to the Pan-American Medical Congress. This will be a splendid opportunity to visit our southern neighbor and ought to be utilized by every physician who can make it possible to attend. Again we would advise all those who are thinking of going to write Dr. D. C. Bryant, of Omaha, for particulars.

The Loup Valley District Medical Society is one of the progressive medical societies of Nebraska. Its officers for the present year are: President, Dr. O. Grothan, St. Paul; vice president, Dr. J. Lue Sutherland, Grand Island; secretary and treasurer, Dr. Frank Salter, Dannebrog. The next meeting will be held September 8th, at St. Paul, Neb.

The book containing the proceedings of the Nebraska State Medical Society is now in the

Digitized by Google

bindery and will be ready for delivery by the 20th inst. Members who have not received a copy by the 1st of September will please notify the secretary. GEORGE H. SIMMONS,
Secretary Nebraska State Medical Society.

THE Medical Society of the Missouri Valley will hold its next annual meeting in Council Bluffs, Iowa, Thursday, September 17th. Titles of papers to be read should be sent to the secretary, Dr. Donald Macrae, Council Bluffs, not later than the 25th of this month.

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.—The ninth annual meeting of the American Association of Obstetricians and Gynecologists will be held at the Hotel Jefferson, Richmond, Va., Tuesday, Wednesday, and Thursday, September 22d, 23d, and 24th, 1896.

THE twenty-fourth annual meeting of the American Public Health Association will be held at Buffalo, New York, September 15th to 18th.

THE American Dermatological Association will hold its next annual meeting at the Hot Springs of Virginia, September 8th to 10th, 1896.

THE Canadian Medical Association meets at Montreal on the 26th, 27th, and 28th of the present month.

Proceedings of the Nebraska State Board of Health.

MEMBERS—Dr. J. V. Beghtol, Friend, President; Dr. C. F. Stewart, Auburn, Vice-Pres.; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.
Board meets first Thursday of each month at the state capitol, Lincoln.

The Nebraska State Board of Health, at its meeting held August 6th, granted certificates to the following:

McKendree Driscoll, Omaha,
Starling Medical College, 1896.
Alfred J. Stewart, David City,
Hahnemann Medical College, Chicago, 1896.
Thomas C. Hollister, Louisville,
College of Physicians and Surgeons, Chicago, 1896.
B. Bell-Andrews, Stella, Neb.,
Marion-Sims Medical College, St. Louis, 1896.
L. J. Townsend, Laurel,
Rush Medical College, 1896.
Robert A. Billings, Ord,
Kansas City Homeopathic Medical College, 1893.
Rudis J. Jicinsky, Crete,
Rush Medical College, 1896.
O. B. Bowers, Oakland,
Hahnemann Medical College, Chicago, 1892.
Wellington A. Franklin, Pauline,
Creighton Medical College, 1896.

AN ORIGINAL METHOD OF USING DRY HEAT OF HIGH TEMPERATURE IN THE TREATMENT OF CHRONIC JOINT AFFECTIONS.*

BY WILLIAM E. WIRT, A. M., M. D., PH. D.,
CLEVELAND, OHIO.

Medical writings indicate that heat and cold have been used for many ages to allay all forms of inflammation. The effect of these agents is determined firstly by their influence in modifying the circulation of the blood, secondly by their power to increase the activity of the lymphatic circulation, thirdly by their modification of the secretion, and fourthly, in certain instances, by the apparent influence on the nerve-supply to a part.

In the effort to allay inflammation by heat this agent has been used of nearly every range of the thermometer, from that of the blood to that of the white heat of the Paquelin cautery. The low temperatures are applied for prolonged periods, ofttime while the higher temperatures are used only momentarily.

The method I am describing contemplates the prolonged use of a high temperature, say 250 to 300 degrees F., for a period of one-half to one and one-half hours. While the prolonged use of low temperatures and the momentary use of high temperatures each modify the circulation, and the latter probably the nerve-supply, they neither of them markedly influence the secretions, and but little, if any, do they increase the lymphatic circulation.

On the other hand, the prolonged use of high temperatures, while in a like manner it influences the blood and nerve-supply, it in addition enormously increases the secretions; and further, it is my belief (though I am not able to demonstrate it) that the lymphatic circulation is enormously increased, thereby rapidly taking up in its circulation the deposits which have taken place in the diseased joint, which in a measure accounts for the greater freedom of motion noticeable in these joints after the prolonged use of high temperature.

Physics and physiology teach us that while the body can only bear a temperature of about 160 degrees in a saturated atmosphere, yet if the air is kept very dry the body can stand a temperature of several hundred degrees F. for part or even a whole hour. To give exact data, it is stated that a man has endured for half an hour a temperature of over 600 degrees F. in a drying oven.

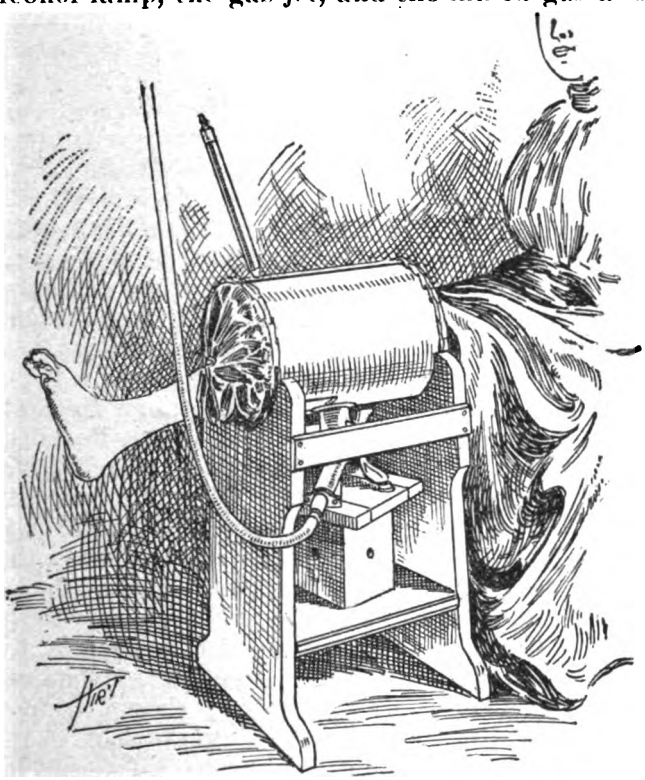
The apparatus consists of a copper cylinder twelve and one-half inches long and ten inches in diameter. Fitting into each end of the cylinder is a wooden ring or disc one inch wide by one inch thick. The wooden rings are secured in the ends of the cylinder by eight short screws passing from the outside through the cylinder into the rings. At each end of the cylinder is a hood which encir-

* Read before the Cleveland Medical Society, June 26, 1896.

Digitized by Google

cles the limb and is drawn tight by means of puckering strings. The hood is made of double-coated rubber cloth, and is attached to the cylinder by being nailed to the wooden rings, the extreme end of the hood being held in place by a wire band. On each side of the cylinder, diametrically opposed, are two or three holes one-half inch in diameter. The purpose of these holes is to allow a rapid change of air in the cylinder. In using these cylinders I have seen the air come out of these holes with such force as to put out a lighted match. The cylinder is supported horizontally in a wooden frame, so that the lower surface of the cylinder is eighteen inches from the floor, or about the height of an average chair.

I have applied heat by means of oil, gasoline, or alcohol lamp, the gas jet, and the mixed gas and



Apparatus for using dry heat of high temperature in the treatment of chronic joint affections. (The foot should have been on a chair of the proper height.)

air jet, which is the Bunsen flame; the latter is probably the most convenient. The heat should not be turned on too rapidly at first, as the patient's endurance is greater if the heat is applied gradually.

In using this method for the knee I apply a layer of cotton to the back of the limb in the popliteal region, securing it in place by loosely tied tapes. This is done for two reasons: In the first place it will equalize the temperature, as undoubtedly the lower part of the cylinder is much hotter than the upper, and secondly, I found that the profuse perspiration resulting from the high temperature caused a dropping of fluid to the bottom of the cylinder, where it was instantly turned into steam, and this steam would immediately scald the limb.

The limb, being thus protected by the cotton, is inserted into the cylinder until the knee is in the center, the heel placed on a chair high enough to keep the calf from touching, if possible, even the wooden rings, which, though they do not ordinarily burn, yet they may get uncomfortably warm. The hoods are drawn tightly around the limb, and at the start rubber corks are inserted in the holes in the cylinder, but are withdrawn when the cylinder is thoroughly heated. The heat is then applied to the cylinder and is carried up to the limit of endurance of the patient, which varies from 250 to 300 degrees, and is kept at this point for an hour or more. One patient of mine could stand a temperature of 290 degrees for over an hour. In a case I recently treated I carried the temperature to the extreme point of 360 degrees F. for a period of nearly five minutes.

The thermometer I use is a laboratory thermometer with a scale that will register up to 450 degrees F. I have found it most satisfactory to allow the patient to hold one end of the thermometer, while the bulb end is held within the cylinder, alongside the knee, against the cotton. Care should be taken not to touch the limb with the thermometer, for if this happens the limb will be listered; this can easily be prevented by the proper use of the cotton.

The number and size of the holes in this cylinder is not sufficient to give perfect ventilation, so that after twenty or more minutes the air in the cylinder becomes so moist from the profuse perspiration that I find it advantageous to loosen the hoods for about a minute at a time to allow a free exchange of air. This lowers the temperature 20 or 30 degrees, but the cylinder is so hot that it quickly returns to its former range.

The effect of such high temperature is to enormously increase the perspiration from the local part, to increase perspiration over at least the surface circulation, to increase the lymphatic circulation, to relieve pain, and to increase motility in the joint. The relief of pain and the increased motility last for some hours after the application of the heat.

To make it a little plainer what these effects are, I will go somewhat into detail. In regard to the perspiration of the local part, I would say that it is so great that if not absorbed by the under layer of cotton it will roll off rapidly in drops, and the whole amount evaporated in an hour must be considerable. The circulation of the blood is also greatly increased and is very apparent on the surface, the part being reddened and the arterioles dilated as is seen in the blush of an erysipelas. The pain and stiffness are greatly relieved. Take, for instance, an old case of gonorrheal rheumatism, or rheumatoid arthritis, and we will find that at all times there is more or less pain, with considerable stiffness, and the motions of the joint are accompanied with creaking sounds. At times there are exacerbations, when all these symptoms

Digitized by Google

are considerably increased. It has been my experience in the use of this apparatus that very soon after the temperature in the cylinder is raised to 250 degrees the patient feels entirely relieved of the pain, and on removing the limb from the apparatus after the treatment it is found that the motility of the joint is considerably increased, and the creaking sounds have greatly diminished or entirely disappeared. The marked effect of the heat is especially noticeable at the time of an exacerbation, when the difference in the condition of the joint before and after the treatment is considerable.

To give you an idea of how hot the inside of the cylinder becomes, I would state that the cotton covering the popliteal space becomes burnt to a brown, and the index of the thermometer, which is of paper and inside the glass tube, also becomes singed to a brown color. I have used the apparatus in cases of simple rheumatism, rheumatoid arthritis, gonorrheal rheumatism, and simple synovitis. I have not as yet used this method in cases of tubercular joint disease, fearing that the resolution which might be brought about might cause a general tuberculosis, instead of the local disease.

At a meeting of the American Orthopedic Association recently held at Buffalo, where I read a paper on this subject, Dr. A. J. Gillette, of St. Paul, Minn., for whom I furnished some time ago an apparatus similar to the one before you, reported that he had used it in a number of cases with excellent results so far, but that he had not used the apparatus long enough to make a final report. Recently, through the courtesy of Dr. R. M. Woodward, I had the opportunity of using this method on what I consider very nearly a test case. Many of you will remember that at a meeting of the Cleveland Medical Society a month or two ago Dr. Woodward reported an old case of gonorrheal rheumatism of some years' standing in a man about forty years of age. The doctor stated that many physicians had given advice in the case as to treatment, but up to that time very little benefit had been derived from the suggestions made; he asked for further advice as to treatment. At that time I suggested that my apparatus be tried, which suggestion has since been followed out. On June 16, in the presence of the house staff of the Marine Hospital, I kept the above patient's left knee in this apparatus for forty minutes. The temperature ranged for the most of the time from 310 to 340 degrees F., reaching at one time the extreme range of 360 degrees F. and remaining there for nearly five minutes. After the treatment the patient said that all the pain had left the joint; the motion of the joint was freer and all creaking had disappeared. The house doctor tells me that since then they have been continuing the use of the apparatus in his case; that on Saturday night prior to last Sunday's storm the patient complained of his knee feeling much worse, stating his belief that a storm was coming, and requesting that the apparatus be used. This was done, and after the treatment the patient stated that the pain was all gone and "that he felt all right." The doctor tells me that the patient is receiving much benefit from the apparatus and is desirous of leaving the hospital.

We all realize how difficult it is to give relief in such conditions as rheumatoid arthritis and gonorrheal rheumatism. Yet I have had patients suffering from these conditions claim that the pain was relieved as soon as considerable heat was attained, and that the motility and the pain were both benefited for some hours. Anything that will give relief to these patients will be hailed with delight by the profession at large, and especially by those suffering from these complaints.—*Cleveland Journal of Medicine.*

Miscellaneous.

Ethics of a Mixed Board.—It has been claimed by the enemy of the association bill that it was unethical for regulars to affiliate with homeopaths or eclectics on a board of medical examiners, and that a state association endorsing such an affiliation would be liable to lose its identity with the American Medical Association. As bearing upon this subject we give below a list of the states having mixed boards, taken from the annual report of the Illinois State Board of Health for 1894: Colorado, Iowa, Illinois, Missouri, Louisiana, New Jersey, New Mexico, Minnesota, North Dakota, Tennessee, Nebraska, Ohio, Utah, Virginia. There are several of the other states that probably have mixed boards. In the condensed laws at hand the exact information as to how their boards are formed is not given, but it is noted that a board of examiners exists and that "no discrimination shall be shown any system of medicine."—*Texas Medical News.*

Entrance Examinations. — Within a few weeks the medical colleges of our land will throw open their doors for the reception of students, to start again "the grind" which leadeth to the formation of doctors of medicine. Already the registration of students is going on, and the first year man, yet to have his eye-teeth cut, swells with pardonable pride when his inside pocket contains the matriculation ticket which says that he is enrolled as a student in his chosen college, subject, however, in many cases, to his passing the required entrance examination, which takes place on his arrival at the college. This proviso, he will soon learn, is in the great majority of institutions of no consequence, and merely a bluff to make him think requirements are real, instead of apparent.

To a certain extent the movement inaugurated in St. Louis recently by the State Board of Health,

Digitized by Google

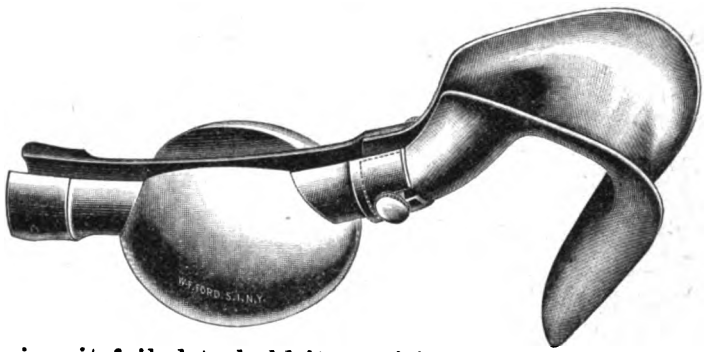
to have united action of the various medical colleges of the city as regards entrance examinations, will be lived up to and will confer benefit upon the profession of medicine. But knowing this fact, there never was a lock devised but that there was a means devised for cracking it; there never was a law inaugurated but that some schemer devised a plan to defeat its purposes; and so when it comes to entrance examinations, we know that while the purpose and intent of the law is good, it will here, in St. Louis, be stretched and distorted so that its own mother would hardly recognize it if she should meet it on the street.

So long as the spirit of commercialism and competition, which, alas! pervade the "objects and purposes" of such an organization as a medical college, there will be a letting down of the bars where in the best interests of the college (?) it is expedient not to draw too fine the line of demarcation between the fit and unfit for the noble, high-minded profession of medicine. We are reminded that competition is the life of trade, and a long list of matriculants and graduates in a medical college annual announcement is supposed to say to its rivals, "Trade is booming in our neighborhood." To keep in the swim, the rivals must publish a list of real or straw men of equal or greater length, and the merry war is on. Now, to get matriculants there must be some inducement to draw the students, either reduced rates or easy examinations must be the attraction—probably both. These matriculants, armed with their bargain day sale of matriculation tickets, are then gathered beneath the sheltering roof of their to-be alma mater, there they must present credentials for the approval of the State Board of Health, and then we see the curtain rung up on the most amusing act in the farce-comedy of examinations. Think of such questions as the following being propounded as fit to determine qualifications for entrance into a medical college, viz.: How long is a piece of string? What is the difference between fizz and bumfuzzle? When does a calf become a cow? If a dog and a half cost a dollar and a half, what will two dogs cost? Where was Moses when the light went out? Some will ask whether the above questions were really asked; we know to our personal knowledge that an oral examination was commenced with the first question and ended with the last. In Milwaukee they have a school in which you can graduate by answering the above questions, providing you pay $35. At Chicago's famous sundown colleges, one of which is now in trouble with the staid and reliable Harvard University, all you have to do is to certify, before a notary, that you are competent to practice medicine, and you get your diploma on payment of a nominal fee. No questions asked. Now Missouri has started the ball rolling in the right direction by requiring entrance examinations, but if she wants to keep her name and fame free from tarnish, she will have to watch the trap for the unfit, now that she has set it, to see that its springs work, and that some fellow don't fool with the machine. We hope to see the determination of the necessary qualifications of individuals to study medicine, and to practice it, determined by a board of examiners. The present lock is a good one, but it is so easily cracked by those who know how.—*Medical Fortnightly.*

Salol may be dissolved in vaseline and used on ulcers. Its healing properties are not injured, while the vaseline keeps it from irritating the skin.

A Modified Vaginal Speculum.—Dr. Andrew F. Currier publishes in the *New York Medical Journal* a description of his new self-retaining speculum, an illustration of which we give.

The original suggestion was a French invention brought to this country a few months ago by Dr. W. M. Polk, with the blade and handle in one piece, and the blade set at nearly a right angle to the handle. This was quite expensive and not entirely satisfactory. Even in very relaxed va-



ginæ it failed to hold its position and would fall out in the most annoying way. It also failed to give the desired exposure of the vaginal vault and portio vaginalis. To combine the merits of the Edebohls speculum, which is one of the very best for vaginal work, with the French instrument seemed to Dr. Currier desirable, and this was finally accomplished with the assistance and patience of the Ford Instrument Company.

The lower part of the handle remains unchanged. The grip is a mass of lead weighing thirty-two ounces, the shaft is tubular for the easy escape of fluids, and the lower extremity has a collar to which rubber tubing may be attached if it is desired.

Just above the grip the detachable blade is adjusted. It makes a tight joint with the handle and is secured with a milled screw on either side, which may be loosened with half a turn. Of course, the detachable character of the blade makes the instrument much more portable, as well as easier to clean.

The blade is set at a very sharp angle, and I have never known it to fall out of the vagina. I

Digitized by Google

have found, however, that the ordinary Edebohls blade is too small to admit of entirely satisfactory operation in very long and voluminous vaginæ, and therefore have had a larger one made with the same relative proportions as the smaller one.

With these two blades, exchangeable at will, all the cases in which I have used them have been quite under control. The handle in question seems to me decidedly preferable to the tin bucket which is used with the Edebohls instrument. Another advantage of this instrument is that it may be bought at a much lower price than the French instrument, and, in my practice at least, it has proved decidedly preferable.

The dimensions of the instrument are as follows: Length of speculum, eight inches; weight of speculum, two pounds seven ounces; length of small blade, three inches and a half; length, of large blade, four inches.

Treatment of Chronic Endometritis.—Dr. Paul F. Munde says that the chief significance of chronic non-puerperal endometritis is the production of sterility. The treatment consists of dilatation and curettage of the uterine cavity, followed by thorough application to the endometrium of 50 per cent of zinc chloride in the worst cases, and of a solution of iodized phenol in milder cases. A sterilized drain is then inserted through the internal os, the patient put to bed, and all precautions taken against inflammatory reaction. A repetition of the cauterization with milder solution, if thought best, usually results in permanent cure in the course of two or three hours. The best hope for permanent cure of chronic endometritis is from impregnation and normal delivery. —*New York Polyclinic.*

Indications for Lavage of the Stomach.—Martius, in *Memorabilien* for April, states the following indications for washing out the stomach: (1) acute poisoning; (2) stagnation in the stomach from stenosis of the pylorous; (3) all cases of occlusion in the intestines, from whatever cause. Irrigation always relieves, and may cure. Guerin commends it in carcinoma, acute and chronic catarrh, and all functional diseases of the stomach. Also in the tympanitis of typhoid fever and nervous dyspepsia, and spasms of the esophagus. In gastric and bowel troubles of infants it is very efficacious.

A New Nasal Splint.—Dr. Behrens, in the *Boston Medical and Surgical Journal*, describes a simple device for fractures or operations for deflected septums. After stating the objection to rubber or ivory plugs, he describes his splints, which he makes of cork, in the following manner: A selected cork, one and one-sixteenth inches long and three-fourths of an inch thick, is whittled to the shape of an almond, with the points cut off and flattened on the side that is to lie against the septum. The other side is grooved for the reception of the inferior turbinated body. A nasal trephine is now used to hollow out the splint, and after being made smooth by fine sand paper is coated with flexible collodion, to which iodoform has been added. He claims that this splint is easily made, and cleaned without difficulty by syringing in situ, and can be worn a considerable time without discomfort.—*The Laryngoscope.*

Effect of Ether and Chloroform on the Kidneys.—Eisendrath (*Deutsche Zeitschrift fur Chirurgie*) reports seventy cases of chloroform narcosis and sixty of ether narcosis. In thirteen there was albumin in the urine before narcosis, in eight of which there was increased albuminuria, in four of which chloroform was administered and four ether. In patients whose urine was free from albumin before operation there was albuminuria in 25 per cent after ether, and 32 per cent after chloroform.

Anti-Streptococcus in Operating on a Diabetic Patient.—Boucheron recently removed a cataract from a patient, seventy years old, in an advanced stage of diabetes, complicated by the streptococcus affection, lymphangitis of the foot and limb. The operation was successful, the wound healing by first intention. He ascribes his success to the fact that he administered 20 grams of Marmorek's serum, which attenuated the streptococci, before he began operations.—*Gazette Medicale de Paris*, May 16.

Latent Gonorrhea.—Dr. Rosenwasser says of the gonococcus of Neisser: The locations of choice are the urethra and vaginal portion of the cervix. A person may in time become accustomed to his own brood of germs so that they cease giving trouble. Transplant them to new soil and they at once affect the recipient with pristine vigor. Then if these regenerated germs are returned to the original owner they will initiate as vicious action as though they had never been there before. This is his explanation of "latent" and "recurrent" gonorrhea.—*Cleveland Medical Gazette*, June, 1896.

Vinegar as an Antidote to Carbolic Acid. —The May number of the *Canadian Practitioner* contains an abstract of an article from the *Semaine Medicale* in which the writer states that, according to Professor Carleton, vinegar is an antidote to carbolic acid. When it is applied to the skin or to a mucous membrane which has been burned by the acid, it causes a rapid disappearance of the characteristic whiteness, as well as of the anesthesia produced by carbolic acid, and it also prevents the formation of a slough. Moreover, it neutralizes any of the acid that may have been introduced into the stomach. The first thing, therefore, to do, he says, in cases where carbolic acid has been swallowed is to make the

Digitized by Google

patient drink some vinegar mixed with equal parts of water, and then to wash out the stomach. —*New York Medical Journal*, June 6.

Black Eye.—There is nothing to compare with the tincture or strong infusion of capsicum annuum mixed with an equal bulk of mucilage or gum arabic, and with the addition of a few drops of glycerine. This should be painted all over the bruised surface with a camel's hair pencil and allowed to dry on, a second or third coating applied as soon as the first is dry. If done as soon as the injury is inflicted, this treatment will invariably prevent blackening of the bruised tissue. The same remedy has no equal in rheumatic stiff neck.—*The Railway Surgeon.*

Varices of the Leg.—Dr. Alexander Hugh Ferguson (*Chicago Medical Recorder*, June, 1896), describes his method of operation. He first ties the saphenous vein in two places near the femoral above the abnormal condition and a section of the vein is removed. Then a semilunar incision is made through healthy skin and extended as far down as is necessary to go until all the varices are partly surrounded. The incision is then deepened to the fascia lata. In the line of this incision all the venous supply is cut off. When the incision is completed down to the deep fascia the entire flap is raised and dissected up. The veins, normal and pathologic, are raised with the flap and the varices and branches dissected from its under surface. In raising the flap the venous communications with the deep veins are severed and ligated. This is a modification of Schede's operation.

The Results of Injections of Erysipelas Toxines Upon Malignant Growths.—At a recent meeting of the New York Surgical Society, a report of which is published in the July number of the *Annals of Surgery*, Dr. L. A. Stimson, Dr. A. G. Gerster, and Dr. B. F. Curtis submitted the following report upon the use of erysipelas toxines in the treatment of malignant disease:

"Both before and since our appointment as a committee, we have been able to observe, individually and together, a considerable number of cases treated by this means, and in no case have we found any amelioration which held out a prospect of ultimate cure. We have, on the contrary, observed in some cases that the rate of growth of the disease was much more rapid during the treatment. The treatment also imposes a very severe tax upon the strength of the patient, and apparently hastens the cachexia in most cases.

"We believe that in the instances of apparent cure or marked improvement the correctness of the diagnosis is open to doubt.

"We therefore submit:

"1. That the danger to the patient from this treatment is great.

"2. Moreover, that the alleged successes are so few and doubtful in character that the most that can be fairly alleged for the treatment by toxines is that it may offer a very slight chance of amelioration.

"3. That valuable time has often been lost in operable cases by postponing operation for the sake of giving the method of treatment a trial.

"4. Finally, and most important, that if the method is to be resorted to at all, it should be confined to the absolutely inoperable cases."

The Methods of Democracy.—We have frequently contended that freedom can be carried too far. Freedom in this country, for instance, consists in every one being allowed to annoy his neighbor, provided only that he acts under the guise of "commerce"—*e. g.*, newsboys and organ-grinders—or "conscience"—*e. g.*, anti-vaccinationists and Peculiar People. In democratic America they stand no nonsense, and the means employed there to convert sinners from the error of their ways are simple and effectual. The following are portions of a letter printed in a Gloucestershire journal and written by a man in Texas to his mother, who lives near Stroud: "I have been much interested in the accounts of the smallpox in your neighborhood. In this free and enlightened country, when it broke out in a town every one was ordered to be vaccinated. Those who objected were held against a wall by one policeman, and another stood opposite with a loaded revolver while the operation was being performed. I should much like to assist in the same way at the vaccination of some of the Stroud people." So should we.—*London Lancet*, July 18.

Necrology.

Dr. Samuel Neeper died at Kahoka, Missouri, July 3d, aged 65.

Dr. S. H. Bottomley died in Chicago, July 26th, aged 51 years.

Dr. J. D. Brownlee, of San Jose, California, died at that place June 24th, aged 76.

Dr. V. S. Hurlbut, of Chicago, died of Bright's disease, July 24th. He was 67 years of age.

Edward B. Stevens, M. D., of Lebanon, Ohio, died there July 11th, aged 72. He was for seventeen years editor of the Cincinnati *Lancet and Observer*, now the *Lancet Clinic*.

Dr. M. S. Thomas, of Leavenworth, Kansas, died July 9th, aged 66. Dr. Thomas came to Leavenworth in 1856. He was surgeon in the confederate army during the war.

Dr. Joseph Bauer, a well-known physician of St. Louis, and the son of Dr. Louis Bauer, died suddenly from chronic Bright's disease, at the age of 42. The doctor held positions in several western colleges and was a speaker of fluency and force and always an entertaining lecturer.

Digitized by Google

Therapeutic Notes.

For Chapped Hands and Face and Sore Nipples.—

℞ Compound tincture of benzoin, 10 minims.
Alcohol . . . . . 2 drams.
Rose water . . . . 30 minims.
Glycerine . . . . . 1 dram.

Mix. Apply to chapped surfaces at night, after washing with soap and water and carefully drying. One application is enough. Good also for sore nipples and cracked lips.

Rhus Poisoning.—In the *American Journal of Pharmacy*, January, 1896, Beringer tells us that he has been a sufferer from this poisoning for years, but that during the past summer washing the face and hands with a solution of hydrogen dioxide has been adopted as a preventive, with apparently good results. Hot soda baths have also appeared to be efficacious in the treatment of the disease, and for a topical application he prefers the following lotion:

℞ Sodium sulphite, granular . . ʒ j.
Glycerine . . . . . fl. oz. ss.
Camphor water . q. s. ad. ft. ℥ iv.

Irritability of the Bladder After Delivery.—Dr. W. E. Fothergill, of Edinburgh, in his new Manual of Midwifery, just published, says that the following mixture is very useful in post-partum irritability of the bladder:

℞ Salol,
Tincture of hyoscyamus . . aa ʒ ij.
Infusion of buchu . . q. s. ad. ℥ vj.
M. Sig.—A tablespoonful three times a day.

For Rhus Poisoning.—Apply a strong solution of the bicarbonate of soda to a surface poisoned by rhus toxicodendron. The relief is said to be almost immediate.

For Spasmodic Asthma.—

℞ Tr. lobelia æthereæ . . . m xv.
Spts. ætheris . . . . . m xx.
Tr. chlorof. comp. . . . m v.
Aquæ camphoræ . . . ad. ℥ j.
M. Sig.—To be taken when breathing is difficult.
—*The Practitioner.*

Infantile Eczema.—In a recent case of most persistent eczema in an infant, Dr. Wells obtained excellent results by the use of the following application:

℞ Carbolic acid . . . . gr. x.
Acetanilid . . . . . gr. xxx.
Petrolatum . . . . . ℥ j.
M. Ft. ung.

The mother was instructed to thoroughly cleanse the affected parts with soap and warm water, care being taken to dry carefully. The ointment was then thoroughly rubbed in three times daily.—*Philadelphia Polyclinic.*

Formula for Acute Rheumatism in Adults.

℞ Sodium salicylate . . . . ʒ jss.
Potassium acetate . . . . ʒ j.
Tinct. nux vom.,
Tinct. digitalis . . . . aa ʒ iv.
Acq. menth. pip. . . . . ℥ ss.
Tinct. cinchona comp. . q. s. ad. ℥ iv.
M. Sig.—ʒ j every three hours.
—*Philadelphia Polyclinic.*

Whooping Cough.—Dr. R. A. Lancaster, of Gainesville, Fla., sends to the *Journal of the American Medical Association* the following formula as a cure for whooping cough:

℞ Tinct. belladonnæ . . . ʒ iv to ʒ vj.
Phenacetin . . . . . ʒ ijss.
Spirits frumenti . . . ℥ j.
Fl. ext. castanea (chestnut leaves) q. s. ad. ℥ vj.
M. Sig.—Shake well.

Dose—From 10 drops for a one-year-old to teaspoonful for ten-year-old child, every two to six hours.

"I am inclined to think that the substitution of atropiæ sulphate for the tincture of belladonna would be a more elegant prescription, but I have had such good results from the formula as written above that I have had no occasion to change it.

"This remedy should be given every two hours or oftener until the flushed face or dilated pupils show that the physiologic effect of the belladonna has been obtained, then the dose can be lessened or the interval between doses lengthened, but the effects must not be allowed to die out until the paroxysms of cough have ceased, which will usually be after a very few hours.

"When one member of a family has developed the disease, others who have been exposed can be prevented from developing any unpleasant symptoms by administering a few doses of the remedy."

Books and Pamphlets Received.

A Board of Medical Examiners vs. The Diploma Law, by Dr. D. Morton, St. Joseph, Missouri.

Gonorrheal Epididymitis, by Dr. Daniel Morton, St. Joseph, Missouri. Reprint from St. Joseph *Medical Herald.*

Artificial Feeding of Infants, by Dr. H. M. McClanahan, Omaha. Reprint from *American Journal of Obstetrics*, 1896.

Treatment of Acute Infectious Diarrhea of Infants. Same.

Indio, the Colorado Desert for Health, by Walter Lindley, M. D. Reprint from *New York Medical Record.*

Glioma of the Brain, by J. T. Eskridge, M. D., Denver, Colo. Reprint from the Denver *Medical Times*, June, 1896.

Temporary Abulic Agraphia, by J. T. Eskridge, M. D. Reprint from *Colorado Medical Journal*, June, 1896.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL I. No. 5. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. SEPTEMBER 15, 1896.

Original Articles.

THE CLINICAL ASPECT OF TUBAL PREGNANCY, BASED UPON A PERSONAL EXPERIENCE IN EIGHT CASES.

BY J. E. SUMMERS, JR., M. D.,

PROFESSOR OF PRINCIPLES AND PRACTICE OF SURGERY AND CLINICAL SURGERY, OMAHA MEDICAL COLLEGE.

At the June meeting of the Omaha Medical Society, in discussing the subject of tubal pregnancy, I took occasion to emphasize my opinion regarding the too great ignorance of the profession about this most important subject, in the following language:

"The great fault I have to notice with reference to the treatment of extra-uterine pregnancy is that too many physicians fail to recognize the anomaly until the patient is either nearly pulseless from loss of blood or profoundly septic from absorption of the decomposing products of the wayward fecundation. I believe tubal pregnancy is more common than is supposed, and that not infrequently deaths certified to be due to "heart disease" among women in the child-bearing period are nothing more than rapidly fatal cases of deaths from hemorrhage due to ruptured tubal pregnancy. Likewise, pelvic abscesses, with sepsis, may not infrequently be due to the same cause and end fatally without the original cause being discovered. My personal experience bears out this opinion, as in only two of the cases which have come under my observation had a correct diagnosis been made."

Among the men associated with me in these cases, and also from several of my friends of experience and painstaking observation, I have learned of at least five fatal cases occurring in their previous practice which at the time were not diagnosticated correctly. And this is the unrecorded experience of every community. The late Dr. Formad, of Philadelphia, when coroner's physician, found upon post-mortem examination, in a single year, that twenty-seven cases of sudden death were caused by hemorrhage from ruptured tubal pregnancy. Exclusive of my own experience, I find after careful inquiry, both as to published and unpublished cases of tubal pregnancy ·h have happened in the practices of my ·r practitioners in Omaha, that very few ·en recognized. One surgeon has seen and operated upon three cases; four surgeons have operated upon one case each; one patient was not operated upon, but the diagnosis established post-mortem.

In the July *Medicine* will be found an abstract of a paper entitled "The Present Status of Ectopic Pregnancy; a Surgical Disease," by Dr. W. G. Macdonald, of Albany, N. Y. Dr. Macdonald expresses so well my own views upon this important matter that I take the liberty of quoting from his article:

"The surgery of ectopic pregnancy is mature rather than old. The pathology and principles of treatment are already established. Yet women are dying every day from ruptured ectopic pregnancy, with no effort being made to rescue them, because the condition is not recognized during life.

"The reason lies principally in the fact that much of the literature has been controversial, abstract, and involved. Pathology and methods of treatment have obscured the most important general topics of clinical history and diagnosis. Favorable results are more desirable than fine pathological distinctions or beautiful frozen sections. All that is needed to complete the chapter of ectopic pregnancy in the history of surgery is a lively appreciation of its importance by the general practitioner—a condition which, happily, obtains in appendicitis.

"What is required is a primer on ectopic pregnancy, direct in pathology, clear in diagnosis, and definite in treatment. Such a compend would, perhaps, not be absolutely true in all its statements, but it would state general truths as a basis for action. The more descriptive pathology is involved by the expression of opinion and of contentions, the less it is likely to create distinct conclusions. There is no symptom pathognomonic of ectopic pregnancy at any period of its history. Diagnosis only follows careful study of the clinical history, and painstaking physical examination."

I wish briefly to narrate my own experience:

CASE I.—In November, 1892, I was requested by Dr. E. W. Lee, of Omaha, to see a young woman in consultation, who gave this history: Age 24; married three months; had had since marriage some endometritis, for which she had received appropriate treatment. Menstruation regular; last period two weeks prior to fatal illness, and normal. About thirty hours before my visit she had been seized suddenly with pain in the abdomen, which was thought not to be of serious import.

Digitized by Google

The abdominal distress increasing and being followed by symptoms of collapse, varying in being more or less marked. A dangerous intra-abdominal lesion was apparent, but its character undecided. A stimulating, expectant plan of treatment had been followed. Upon entering the room the color, facial expression, respiration, and restlessness were taken in at a glance and a "snap diagnosis" of ruptured tubal pregnancy announced. The pulse was thready and scarcely to be felt. The abdominal wall was resistant to pressure. There was some dullness in the flanks. A boggy mass was plainly discoverable in the pelvis upon vaginal examination. The diagnosis was established, but, alas! the treatment followed was reprehensible. Nothing was done. The vital forces were thought to have been sapped and the woman was allowed to die, which she did in about four or five hours, without an effort made to save her. The post-mortem examination disclosed an abdomen filled with blood, the source of hemorrhage, a ruptured tubal gestation sac at about the middle of the tube, of about the size of a hickory nut. It would not have taken more than five minutes to have stopped the bleeding. (I shall refer to this case later when considering technique of operation.) I have never forgotten my advice in this case, but that was four years ago, and we have all learned much since then.

Case II.—During December, 1894, I saw, in consultation with Drs. Margaret Heimrod and W. H. McClanahan, a woman 34 years of age, the mother of two children. She had had a number of miscarriages, and a few days prior to my visit, believing herself some three months pregnant, had resorted to mechanical methods to bring about abortion, resulting in the usual symptoms of a supposed success, *i. e.*, pains, hemorrhage, and the passage of smaller or larger clots, one of which was imagined to be the product of conception. A careful inquiry by the physicians in attendance having elicited nothing irregular, and the symptoms pointing to the retention of some of the remnants of an unexplained miscarriage, the uterus was curetted. The day after this I was summoned in consultation and found a woman in collapse, and evidently suffering from internal hemorrhage. The diagnosis of ruptured tubal pregnancy was made and an operation done, resulting in the removal of a two and one-half months gestation sac and contents. The sac had formed in the right fallopian tube, and the rupture had resulted in the deluging of the abdominal cavity with blood. Every effort was made (intravenous saline injections and hypodermic cardiac stimulants), but at the end of about twenty-four hours death occurred. There had been no reaction; the shock from hemorrhage had been too overwhelming.

Case III.—In September, 1895, Dr. Lauritsen, of Exira, Iowa, sent me a woman who, supposing herself about two months pregnant, had attempted an abortion by passing a darning needle into the vagina in the direction of the uterus. This had been done about one week before the doctor sent the patient. She entered the hospital at night. Temperature 103 degrees F., pulse 110. The same night a bulging into the vagina in Douglas' pouch was incised freely and the evidences of a conception easily recognized. Irrigation and gauze drainage was made. After one week, the septic symptoms still continuing, the abdomen was opened and the uterine adnexa (in a markedly suppurative condition) removed. The woman was given every modern attention, but finally, after four weeks of uncontrollable sepsis, died.

Case IV.—On March 10, 1896, I received a message from Dr. Ashby of Red Oak, Iowa, to make him a visit for the purpose of operating upon a woman for pelvic abscess; he stated also that possibly a hysterectomy might be required. The patient was 25 years old; had one child, three years of age; had had one miscarriage; last menstruation October 20, 1895. For three months after this last period a normal pregnancy had been conceded, but shortly after obscure symptoms developed, with mild febrile phenomena, the usual symptoms of pregnancy, excepting absence of menstruation, disappearing, with at the same time an increase of the febrile signs, these gradually merging into those of a pronounced sepsis.

A tumor, filling the pelvis and encroaching towards the umbilical region was palpable. There was a foul-smelling discharge from the rectum. Temperature the evening before my visit and day of operation 103.5 degrees F., pulse 140. Day of operation: Temperature 102½ degrees F., pulse 130. Diagnosis: Suppuration of an ectopic pregnancy. Upon median section a large succulent uterus, reaching nearly to the umbilicus, with a dense-walled, fluctuating swelling within the folds of the left broad ligament, was exposed. Adhesions were dense and universal. After careful gauze packing a vertical incision to the outside of the left rectus muscle was made, through which the fluctuating tumor was incised. It contained a putrid fetus of three months' gestation, and a quantity of detritus and dark, grumous, sewer-smelling fluid. Irrigation and drainage were provided for and the patient made an uninterrupted but somewhat tedious recovery.

Case V.—March 20, 1896, I was requested to see a lady 30 years of age, the mother of one child, eight years of age; no miscarriages; last menstruated in December, 1895, and was supposed to be pregnant. Had had three attacks of violent abdominal pain, one of which, the second, five weeks before I saw her, was so severe as to cause collapse and confinement to bed for five days. There was then a slight bloody vaginal discharge. The case had been regarded by a physician in Chicago, where she was visiting, as "bowel trouble." The condition presented at my visit was that of a woman in threatened miscar-

Digitized by Google

riage, and had been regarded as such by the attendant for a number of days. The patient's condition was becoming so alarming that upon consultation by wire with Chicago friends the urgency of the case was recognized, and through the courtesy of Dr. Senn I was placed in charge of the patient. An examination revealed a slightly enlarged uterus, surrounded by a boggy tumor in the pelvis, which reached upwards on the left side quite to the lower ribs. The diagnosis was simple —rupture of a tubal gestation sac, the hemorrhage occurring from time to time and being more or less limited by adhesions. Operation, March 21, 1896, proved its correctness, the fetus (three months) being found free among the intestines.

There was a large quantity of clotted and fluid blood, filling the whole pelvis and reaching well up into the abdominal cavity, and being in part held in by limiting adhesions between the intestines. The patient recovered.

CASE VI.—A woman 21 years old was sent to the Clarkson Hospital April 6, 1896, by her physician, Dr. Robert Gilmore, of Omaha. She had one child, two years of age; had had no miscarriages. Last menstruation January 26, 1896. Began flowing about the middle of March and this had continued to date of entrance into hospital. There was constant pelvic pain, which had increased in intensity. The temperature was 100 degrees F., pulse 100. Examination revealed a slightly enlarged uterus, rather firmly embedded in a boggy mass, which filled the pelvis and could be felt above Poupart's ligament. Diagnosis: Ruptured tubal gestation sac on left side, with slow hemorrhage, limited by protective intestinal adhesions. I had seen the woman in consultation after the birth of her child two years before, when she suffered from puerperal sepsis. The whole pelvis was then filled by an inflammatory exudate and I had been called with a view to an abdominal section.

The temperature and pulse were high, the abdomen distended—her condition desperate. Curettage and hot antiseptic irrigation were advised. I heard that the patient had died and only knew differently about one year later.

Upon operation, April 7, 1896, the diagnosis was confirmed. The pelvis was filled by clotted blood; the ruptured left tube still contained the products of a six weeks fecundation. The stomach, although not dilated, together with the transverse colon, were adherent at the brim of the pelvis and formed a part of the protecting wall restraining the hemorrhage. This was a true ptosis of these viscera. The right ovary and tube were normal—an interesting fact in connection with their apparent suppurative condition following the birth of her child two years before. The woman recovered.

CASE VII.—On the afternoon of May 15, 1896, I received a telephone message from Dr. Long, of Madison, Nebraska, to come on first train and see a woman aged 32, mother of three children, who had had four miscarriages (twins in two cases); last miscarriage in December, 1895. The patient had menstruated regularly until six weeks prior to my being summoned. There had been a slight bloody discharge from the vagina for two weeks. The doctor telephoned that he had a case of ruptured tubal pregnancy and based his diagnosis upon the following facts: At seven o'clock in the morning his patient, while in the bath room had been suddenly seized with pain in the abdomen, so severe in character that she had to be assisted into her bedroom. The pain was so severe that the doctor, who saw her a few minutes later, administered a hypodermic of morphia, gr. ¼. About one hour later the pulse was found to be very rapid and feeble, pain still severe, and the woman almost collapsed, restless, and still complaining of the pain. Although a vaginal examination revealed nothing positive, yet, taking into consideration the history and alarming condition of his patient, the doctor rightly concluded that he probably had a ruptured ectopic gestation sac to deal with, and resorted to the usual restorative measures. The general condition soon became more alarming, patient unconscious, pulse imperceptible. Upon my arrival at midnight I found that there had been a slight reaction; the pulse could be recognized, and there were indications of returning consciousness.

Immediate preparations for operation were made, but relying upon the opinions of Dr. Long and Dr. Bear, of Norfolk, who had also been summoned in consultation, that the reaction, although slow and feeble, was positive, I decided to delay operative interference, with the hope that a more positive reaction would follow and thus increase the chance of a successful result. At 9 A. M., May 16th, I operated, the woman's condition being much improved, but still extremely critical. The section disclosed a pelvis running over with blood coming from a ruptured tubal pregnancy, the ectopic sac being close to the uterine end of the tube. The patient recovered.

CASE VIII.—The following case belongs to a rare form of pregnancy, and although perhaps not strictly belonging to the class under consideration, may be cited:

On July 9, 1896, a physician friend practicing in the interior of Nebraska brought his wife to me. She gave the following history: Age 31; married two years; last menstruation January 5, 1896. On May 30th there appeared a slight bloody vaginal discharge, which had continued irregularly until the date of my seeing the case. For the last three weeks there had been some odor to the discharge. A diagnosis of tubal pregnancy had been made by a local surgeon and an operation arranged for, but the program was changed and the patient brought to Omaha. Examination discovered the uterus, easily felt above the

Digitized by Google

symphysis, hard and somewhat fixed, with an irregular outline at right cornua and uterine end of right fallopian tube. Douglas' pouch free. Left side normal. A diagnosis of interstitial pregnancy was made. The surgeon who had proposed to do the operation, two days prior to my seeing the patient, had introduced a sound three inches into the uterus. This last operation, together with my rather prolonged and possibly severe manipulations, brought about a most favorable termination. The next day the patient, who had been sent to the Clarkson Hospital for observation and further examination, was delivered per *vias naturales* of a shrunken but fully developed three-months fetus and recovered without a bad symptom—a happy escape from a useless operation.

The brief histories of the foregoing cases are instructive and include the emergency forms of this lesion. All others may be approached with more deliberation.

As to technique of operation, I would urge one or two points. If the woman is nearly pulseless and the abdominal cavity full of blood, as little shock should be added to the condition as possible. The abdomen must be opened quickly, possibly under cocaine anesthesia, and a clamp placed upon the uterine end of the tube and also one upon the broad ligament outside the tube and ovary. No attempt should be made to bail out the cavity in such cases, at least not until reaction is well established. Other commonly recognized restoratives must be employed with vigor and judgment. Hot saline intra-venous injections and enemas; strychnia and digitalis hypodermic injections; artificial heat to the surface of the body and a dependent position of the head with the body at an angle of from 30 to 45 degrees, comprise most of these.

If in Case I this plan had been adopted the result might have been different. In all of the other cases reported the usual technique, varied according to indications, was followed, such as we employ in every-day pelvic surgery. I believe we may sometimes differentiate between two classes of cases, both seemingly urgent, but the one only apparently so, *i, e.*, by comparison. Case I illustrates a form in which no delay is admissible, Case VII one in which delay is desirable. When the pain and shock immediately following the period of supposed rupture result in a rapid, almost imperceptible pulse, the probabilities are that this is due to the shock of rupture, and not to the loss of blood, and that if, after a shorter or longer time, reaction begins, we may expect a still greater improvement. In such a case we should be prepared to operate at any moment, yet not too eager to begin. If the rapidity of the pulse is progressive, even if its character is not alarming at the time of the supposed rupture, no delay is permissible. In this form there can be no reaction and abdominal section should be immediate.

Prior to rupture and in cases where the leakage is small, gradual, and limited by adhesion, vaginal section may be employed; in all others abdominal section is demanded. Any man capable of making a vaginal section in the former is more capable of doing a laparotomy in the latter.

I would urge every practitioner of medicine to study closely the subject of diagnosis in ectopic pregnancy. Upon this hinges the treatment, whether active, temporarily passive, or negative.

Many cases of rupture of the tube into the broad ligament recover without operation, as well as those of expulsion of the fetus into the abdomen early in the period of gestation.

When the pregnancy is of the abdominal variety, near or at the usual normal period of termination, an attempt should be made to deliver a living child by abdominal section. I have no patience with the moral caliber of men who, because many of these unfortunate human beings, if delivered alive, may not be sound in mind or body, for this reason, added to the additional risk to the mother, advise postponement of interference until after the child has died and the danger of hemorrhage from operation to the mother lessened.

PRACTICAL ASEPSIS IN OBSTETRICS.*

BY J. LUE SUTHERLAND, M. D.,
FIRST VICE PRESIDENT OF THE NEBRASKA STATE MEDICAL SOCIETY,
GRAND ISLAND, NEB.

A few times in my professional experience I have been provoked and disgusted on account of the physician I had called into consultation suggesting a remedy not procurable under the circumstances, or recommending a line of treatment impossible to follow in the case in hand. Almost equally absurd are some of the writings found in our best medical publications, and written by men of profound learning and acknowledged professional ability. Especially is this so in articles upon such subjects as "The Care of Pregnant Women," "How to Secure Asepsis in Confinement," "The Management of the Parturient," etc. The suggestions therein made and the equipments therein advised could be complied with and carried out in detail in well-appointed maternity hospitals, perhaps once in fifty attempts; in an outdoor city practice among the wealthy, perhaps once in ten thousand cases; but in a general practice among the middle classes in the country, never. Hence, the query very naturally arises, of what value are such writings? Some may answer, "If for no other purpose, they are of great benefit by giving to the rank and file of the profession 'a high ideal.'" But is this true? I would not underestimate the value of high ideals, nevertheless I claim that any article, however scientific, and

* Read before the Nebraska State Medical Society, Lincoln, May 20, 1896.

Digitized by Google

however nice it looks in print or reads before an audience, if it is not of some practical utility it is too soon lost sight of to be of any great value as an ideal teacher.

It is the object of this brief paper to deal strictly with the practical in all it may say relative to the subject in general, and the aseptic features of it in particular, and to this end recommend methods of procedure which shall be within the reach of all who may essay to practice the art, and at the same time be efficient in all cases and under all circumstances when the physician has full control. It requires no argument at this day to prove the direful and wide extended results of "bad midwifery." Infection at the time of delivery, or at some time within the puerperium, is what is meant by "bad midwifery" in ninety-nine per cent of all pathologic cases. Saying nothing of the immediate mortality from this cause, the records of the transactions of the gynecological societies in this country alone are amply sufficient to warrant almost any statement, however extravagant, charging these various results to this same prolific source.

"Has not known a well day since the birth of her first child," is the familiar introductory to a vast number of the continued stories found upon the pages of the case-books of the gynecologists. Complications of various natures may have arisen since, but infection at the first accouchement not only broke down the barriers which had hitherto protected the pelvic viscera from invasion, but rendered the system susceptible to every subsequent exposure, however trivial. The explanation for so much faulty midwifery may be classed under four principal heads: First, ignorance on the part of the laity as to the necessity of placing the woman under the advice of a competent physician early enough. Second, ignorance and incompetency on the part of the physician as to methods and technique. Third, willful disregard on the part of the physician of the principles of surgical cleanliness, with consequent failure to do his whole duty. Fourth, willful disregard of the doctor's advice and instructions on the part of the patient and her attendants. You will observe that in this classification I make no mention of that ever-present menace to the health of American mothers, the midwife. Neither is she or her work considered in this paper. But since there is much room for improvement among the profession in this as well as any other department, and since every advance must be made, and every burden borne by the profession, it is to the profession exclusively that this paper is addressed.

Taking up the first head of our classification, a very important step would be the proper education of the people. That this is a task as needful as it is difficult requires no argument; but if undertaken in the proper manner and prosecuted vigorously and continuously much good can be accomplished. To this end let every physician consider it an imperative duty to impress upon his patrons the gravity of the situation at such a time, and point out to them not only the possible but probable consequences of improper or inefficient attention, and the necessity of engaging their accoucheur at least one month before they expect to need his services, and earlier in all cases where there is the slightest departure from physiologic gestation. Let the laity become convinced that the cause of so many "bad gettings-up" after confinement is due to uncleanliness and improper management at the time of delivery, rather than to "catching cold" on the third day, and the now quite prevalent idea, that so long as everything "comes by itself" a woman can attend the case as well as a doctor, will cease to exist. Furthermore, let every physician, when his services have been engaged prior to the expected time, show his appreciation of the situation by calling upon the woman, thoroughly acquainting himself with her exact condition, and giving explicit instructions as to how she shall conduct herself, what preparations she must make and have made for her as to bathing, diet, regulation of the functions of the bowels and kidneys, the preparation of her room and bed, the providing of a sufficient quantity and quality of cloths, wash basins, etc., and the people will become proportionately interested, and the subject of childbirth will occupy a correspondingly higher plane of importance among them.

But with all our advice and instructions to the expecting mother, let us be practical and shape our demands in keeping with the circumstances of the family. There is no more need of a woman bathing in sterilized water because she is pregnant than there is at any other time; much less need is there that she drink nothing but sterilized, or, as some writers have advised, distilled water during her gestation. We must insist upon a certain amount of cleanliness in everything which comes in contact with the patient, exercising tact, of course, in giving instructions, but under no circumstances should we incur the risk of making ourselves appear ridiculous by asking a patient to supply us with sterilized safety-pins. (Dr. Benjamin, *Journal of the American Medical Association*, January 18, 1896.) Such an outfit as he describes and recommends, however desirable, if asked for among the patrons of the average practitioner, would strike terror to the pocket-books, if not the hearts, of the husbands and prospective fathers, and in the majority of the cases would result in the doctor being informed that his services would not be required, and in all probability Hebamme Smutzigfinger would subsequently deliver the woman. We should at all times be able to show to the people the practical results of our training by being equal to every emergency, even under trying circumstances and surroundings most forbidding. In the absence of sterilized safety-pins, or pins of any kind, we will seldom find a home in which we cannot procure a needle and thread with which we can sew on the binder, and we need not take the pains to pass the same through

Digitized by Google

the flame of a lamp before using if we have been clean in all our work up to this point. We should bear in mind that success depends wholly upon us, regardless of the great helps we may find in the well-regulated home, and the physician who is not possessed of an ever-present knowledge and a high appreciation of the cardinal points in aseptic procedure, will find failure in some shape written all over his work, though at all times surrounded by complete and elaborate equipments.

I insist that the obstetrician should not only be scrupulously clean and exact in all he does, but he himself should do all there is to be done concerning his patient from first to last. I know of no way that he may have a basin of sterilized water furnished him except he goes direct to the kitchen and waits upon himself, for if there is any method by which a husband, a waiting woman, or a servant girl can be taught to get it without testing its temperature by thrusting into it a finger, or more often the entire hand, I do not know of such a method. Nevertheless, some physicians seem to think that as soon as the third stage of labor has been completed their work is finished, and they consign all that is to follow to any woman who may be present. Is it not painfully evident that all the good work of the most careful physician can be rendered nil in a moment by such a course? But few women who are not physicians or trained nurses know what surgical cleanliness in anything means. Most of them think that any old rag is good enough to absorb the lochia, and not one in fifty has correct ideas concerning the office of the maternal binder. The proper cleansing of the person of the patient, the removal of soiled garments and bed furnishings and the replacing with clean, and the application of absorbent dressings are equal in importance to any part of the delivery, and we should know the nurse well to even permit her to assist to any great extent in the first washing and dressing. I do not mean by this that infection must necessarily follow improper or unclean management in all cases, or even half of them, but it is taking an unnecessary chance in every one that is so managed, and this we have no right to do.

I am not in sympathy with the doctrine that every case of labor is a case of surgery; nor do I believe that every case of normal delivery is purely physiologic; but of the two it is far safer to believe in the former, and act accordingly in every case, than to believe the latter in any case; and at all times should we remember how easy it is to change a purely physiologic into a pathologic condition, while the converse, alas, is not so easy. But, as I have before stated, and as the title of this paper designates, let us be practical, and especially so in giving our previous instructions to the patient and family.

An equipment something like the following has always served me well and can always be ready and near at hand: In an ordinary sixteen-inch obstetric bag we put one four-ounce bottle of Squibb's chloroform, a two-ounce bottle of carbolic acid 95 parts, glycerine 5 parts; one two-ounce bottle of alcohol, an ounce bottle of equal parts carbolic acid crystals and tr. iodin, a cake of good soap, a nail brush, one pair of uterine dressing forceps, one intrauterine applicator, one tin tube two inches by six inches, and one a little smaller, the first full of absorbent cotton, the other iodoform gauze. To these can be added, when starting to attend a case, a pair of obstetric forceps, a fountain syringe, and other minor possible necessities. With this simple outfit, together with a few common utensils which are to be found in the most humble home, every requirement may be satisfactorily met. We seldom find a family that are so destitute but that they are able to provide something in which to boil water, cotton cloths of some kind, and earthen vessels which may be utilized as wash basins. Upon entering a house to attend a case of labor the first thing to do is to ascertain the condition of the kitchen fire and the teakettle, and not only give directions concerning them, but see to it that your orders are obeyed; the next step, after having divested yourself of all superfluous clothing, wash and disinfect hands, forearms, and elbows; then turn the attention to the patient. After satisfying yourself that there is nothing abnormal in her symptoms and having inquired concerning the action of the bladder and bowels, give her an enema and thoroughly empty the rectum. Next inspect the genitals, carefully separating the labia and noting the absence or presence of a discharge, if any, its character and amount. If satisfied that there is no purulent discharge, no ante-partum douche is indicated, and to give one might be harmful; but before proceeding further apply over the entire vulva a piece of absorbent cotton which has been thoroughly soaked and lightly squeezed from hot carbolized water. With this carefully wash the parts, including the lower portion of the abdomen, inner and anterior surfaces of the thighs, and the buttocks. Then again wash and disinfect the hands, thoroughly anoint the right with soap, and we are now ready to make the examination. At this examination seek to ascertain all that is possible or needful to know. In all normal cases there will be but little need to repeat it, but each time it is deemed necessary to explore the vagina the hand must have been rendered aseptic immediately before it is done. At different times throughout the labor a clean dry cloth should be placed beneath the hips of the woman, as this not only diminishes the chances for infection, but adds to the comfort of the patient, and she will be correspondingly more quiet and easier to control.

From the moment the child is born until the woman has been washed and the final dressings applied the vulva should be carefully covered with a sterilized sponge of either cotton or gauze previously squeezed from hot carbolized water, and changed as often as cleanliness requires.

Digitized by Google

From the moment the child is born until fifteen or twenty minutes after the delivery of the placenta, firm, steady pressure, and kneading should be maintained to the uterine fundus, and the final dressings should not be applied until fully an hour after the completion of the third stage of labor. This will enable us to ascertain the condition of the uterus as to the strength and permanency of its contraction, and by getting rid of the excess of blood and clots the first absorbent pad will remain clean longer and not necessitate changing so soon. In the final cleansing of the parts slightly carbolize about a gallon of boiling hot water in a clean basin; into this put three or four sponges of cotton or gauze. After they have been thoroughly saturated squeeze out one and gently insert it between the labia, merely touching and removing until it has cooled sufficiently not to scald the parts. With a fresh sponge repeat this operation two or three times, then holding the last one used firmly against the labia, with another wash all the surrounding soiled parts, dry them thoroughly and apply the absorbent pad as follows: A piece of iodoform gauze first, then a large piece of absorbent cotton, then a large soft cloth folded to several thicknesses, and over all the perineal strap at least four inches wide, and pinned both behind and in front to the maternal binder. For the outside cloths of the absorbent pad old empty flour sacks will answer our purpose admirably, and it does not matter whether they formerly contained Pillsbury's Best or Fancy Patent, so long as they have received the proper attention in the way of washing and boiling since they had ceased to serve in their original capacity. If we have guarded every step carefully and thoroughly up to this point and can now leave the house with a clean woman in clean garments and in a clean dry bed, we can go about our other duties with a clean conscience and need have no fears as to the outcome as far as our connection with the case is concerned.

The subsequent management of all normal cases may be entrusted to a nurse or waiting woman, provided, of course, we give her explicit instructions and feel assured that they will be strictly obeyed. We should make it an infallible rule to never permit the nurse, unless she is one of recent training, to administer a post-partum douche. It is never necessary following normal labors if the subsequent management of the patient is right and proper; and at this point I wish to enter a firm protest against those teachings which say "the act of urination should be performed upon the back" (Lusk, 3d ed., p. 252), which I take it means that the patient should lie upon the back while urinating. This is not only wholly unnecessary in every normal case, and in nine out of ten of all others, but oftentimes is productive of absolute harm. Hence to obviate the necessity of a post-partum douche and diminish the chances for infection, after the lapse of six or eight hours the woman should be lifted upon the vessel and allowed to remain in the upright position until she has satisfactorily relieved the bladder; at the same time the vagina has expelled its contents, both of which are absolutely necessary for the comfort as well as the health of the patient. This should be done each time she feels a desire to urinate. Should the nature of the labor indicate the necessity of the post-partum douche the physician himself should give it, using all necessary aseptic precautions.

In conclusion, I desire to emphasize what I have already said in regard to being practical. Where the circumstances of the family will warrant, require them to provide beforehand all that we are likely to need. But we must not forget that at best they are only helps, we must do the work, and he is incompetent and without excuse who is not prepared to encompass asepsis in a case of labor in the hovel with nothing but the contents of an obstetric bag such as I have described, and the most meager domestic utensils, as well, though perhaps not as easily as in the mansion with every need supplied. And the physician who has no higher conception of his duties and responsibilities, or who is so indifferent to the welfare of his patient as to entrust all of the after management to unskilled or unclean hands, is a reproach to the profession and unworthy of the title he has seen fit to espouse.

CHLOROFORM IN LABOR.*

BY DR. GEORGINA GROTHAN,

ST. PAUL, NEB.

I have chosen for this paper the subject of chloroform in labor, which is an old topic, and one upon which much has been said and written since its introduction into obstetric practice by Sir James Simpson in 1847. During the last few years there has arisen much diversity of opinion regarding its administration to this class of patients.

In presenting this paper, I do so, not with the view of bringing to your notice anything new or original, but simply to lay before you for discussion a matter which does not now seem nearly so well settled as it was a few years ago.

It is, indeed, but a very short time since to discuss the merits and demerits of the use of chloroform in labors, normal or otherwise, would seem wholly superfluous. In fact, there was scarcely heard a dissenting voice in regard to the routine administration of chloroform in every case falling into the accoucheur's hands. At the present time, however, there has arisen what we might be tempted to term a healthy reaction, whereby routine usages must give way to scientific precision, and where discrimination in the exhibition of anesthetics must be made in obstetrics, as well as along the line of allied surgical measures.

For obvious reasons the consideration of anal-

* Read before the Nebraska State Medical Society, Lincoln, May 20, 1896.

Digitized by Google

gesics and anesthetics, other than chloroform, will be dispensed with; their indications are so plainly laid down and familiar to all that we can scarcely err in their use.

In the first place it may be well to view the different stands now taken by the profession with reference to the use of chloroform in normal labors. We speak of chloroform, for it is almost universally the anesthetic employed in this country.

Some few authorities, and notably Fordyce Barker, as stated by Dr. Withington,* favor the habitual use of anesthetics simply as a relief to the pains of labor. They hold that this is a humane act due every parturient woman, and report none but the most favorable and agreeable results to have followed their practice. A second class resorts to the use of chloroform whenever the patient calls for such relief, considering, however, that this course slightly increases the length of the labor and may suspend the activity of the pains, a risk they willingly assume for the sake of affording the patient relief. Others, still more conservative, accede to the call for an anesthetic only when the pains are very severe and exhausting; in other words, refuse it in normal labors. A fourth class are so strongly impressed with the dangers in consequence of the use of anesthetics, fearing exhaustion, inertia, and post-partum hemorrhage, to such an extent that, even in cases demanding instrumental interference, they prefer to limit its use to the minimum, or even then to dispense with it altogether.

The question now arises, to which of these classes do we individually belong. It may be well, before we answer this question, to fix in our minds the several classes of comparatively normal obstetrical cases and the effect of chloroform upon each class. In speaking of the effects of chloroform, unless otherwise stated, we refer to its administration not to complete unconsciousness, but simply to the use of enough to give the patient partial assuagement of pain.

First—In a certain per cent of labor, say 20 per cent, chloroform has no, or very little, effect upon the expulsive force of the uterus. Second—In another limited number of cases, probably smaller than the first, the administration of chloroform calls into aid latent auxiliary forces that have been masked by an unnatural nerve-excitability, and in this class promotes labor to an early and favorable termination. Again, by far the largest class of cases, which embraces at least one-half of all labors met with, the administration of a moderate amount of chloroform is followed by diminution in contractions, in inverse ratio to the amount of anesthetic given. Fourth—We meet with a few cases in which a very small amount of chloroform will practically suspend for a longer or shorter time almost every sign of uterine contractility. This, it is true, does not often occur, but almost every one of us has met a condition where the case was progressing favorably until the patient was allowed a few inhalations from an Esmarch mask, when labor ceased and possibly required instrumental delivery.

In the oft-quoted experiments of Doenhoff,* where he subjected eight parturient women to more or less complete chloroform narcosis, and estimated the strength of the uterine contractions by means of Schatz' toko-dynamometer, he concludes that chloroform, even in a small quantity, has a paralytic action exerted on uterine contractions. Under complete anesthesia, the intensity of the contractions is diminished one-half, the diminution becoming more marked as narcosis continues. If the anesthesia is partial, the pains are irregular in force and rhythm. If it be profound, the intervals are greater and the pains long and feeble. After the patient regains consciousness it is two hours before the contractions regain their normal strength. In one case of chloroform anesthesia ten hours elapsed before the contractions again became normal.

With respect to the direct dangers from the use of chloroform in labor, it is conceded that the number of well-authenticated cases of death from this cause is very small, although this may not be said of its secondary influences. Generalized positive contra-indications for its use may hardly be said to exist, and I cannot now picture to my mind one general rule prohibiting the use of chloroform in labor that would hold good in all cases. Therefore each parturient woman becomes a law unto herself. Perhaps a decided contra-indication for both chloroform and ether, as observed by Dr. A. B. Cates,† exists in a condition of acute anemia produced by exhausting loss of blood. In such cases the absorption of the anesthetic is overwhelmingly rapid. We may say that in our judgment it is better, in most instances, to withhold chloroform in the first stage of labor, and if an analgesic is positively required, others may be substituted.

My experience in hospital practice, both as interne and house physician, has ben that the majority of labors terminated more satisfactorily without the use of chloroform; but, for reasons over which we have no control, this may be somewhat altered in private practice in order to maintain our standing as accoucheurs. As, for instance, the patient will tell you that such a splendid doctor attended her in her former confinement; he gave her so much chloroform that she knew nothing at all until the baby was dressed, etc.

As before stated, the contra-indications for the use of chloroform are few, and the time-honored prohibition in organic heart lesions and nephritis is no exception. In fact, these two conditions call for chloroform to diminish shock and to allay central nervous irritability.

* Reference Handbook, vol. IV, p. 323.

* Revue Medico-Chirurgicale des Maladies des Femmes, Jan. 25, 1893.
† Northwestern Lancet.

Digitized by Google

The following conditions may be summed up as demanding chloroform: First—It may be used even in the first stage of labor in some patients with a predominating neuro-hysterical element that cannot otherwise be controlled. Second—Patients in the second stage, with short, sharp, irregular pains that seem to accomplish but little except exhaustion of the patient. Third—Late in the second stage, with rigid unyielding soft parts. Fourth—To lessen the severity of the pains, when from the excessive contractile power of the uterus the child's head exercises a vulnerable force on the perineum without sufficient time being allowed this body for physiological relaxation. Fifth—In patients with nervous phenomena, bordering on or resulting in actual eclampsia. Sixth—In threatened rupture of the uterus known by the existence of a well-marked contraction ring. Seventh—In all cases of version. Eighth—In instrumental delivery and all operative procedures. Ninth—In rare cases of uterine inertia, with restlessness, the use of chloroform will for a time suspend labor and give the patient needed rest, which may result in efficient contractions. Tenth—In the third stage, with adherent placenta, and in some cases of retained placenta, in which the lower uterine segment is unduly contracted. Eleventh—In the repair of the perineum.

In the last named indication profuse hemorrhage may sometimes be occasioned by the first exhibition of chloroform. In such cases the anesthetic will, of course, be discontinued. In the exhibition of chloroform to our parturient patients we must ever be watchful of two effects, viz., retarded or suspended labor and hemorrhage.

INTUBATION.*

BY H. M. MCCLANAHAN, A. M., M. D.,
OMAHA, NEB.

I wish to call the attention of the society to the indications for and limitations of intubation, together with some hints as to the general management of these cases of laryngeal stenosis.

In the first place, let us get as clear ideas as possible of the indications for this operation. No hard and fast rule can be given. Every case of laryngeal stenosis does not require intubation, and the operation should not be done without good reasons. In many cases, however, we delay too long. One important fact I wish to suggest, namely, that many children do not die from strangulation, but after days or hours of labored breathing they become exhausted and die, not by asphyxia, but simply by poisoning of the nerve centers by carbon-dioxide. It has been my experience to have witnessed a number of children die from diphtheritic croup, and nearly all of these cases death was not by suffocation. Therefore there comes a time when these cases are past help; when intubation will not save life, for the reason that the child is already worn out and the nerve centers exhausted. I believe every physician here who has used the tube will agree with me that we see cases where the operation fails because the tube was introduced too late. All such cases bring the operation into disrepute. On the other hand, we hesitate to intubate simply because the child presents some difficulty of breathing. Briefly stated, those symptoms that most clearly indicate the time for intubation are as follows:

First—Labored respirations, particularly when the expiratory act is difficult and prolonged.

Second—Marked restlessness, the child rolling from side to side in the vain effort to breathe.

Third—The absence of normal vesicular murmur, showing a stasis of air in the vesicles. This is a very important symptom, and one, however, that is frequently overlooked, because careful auscultation is neglected.

Fourth—Most urgent of all is the epigastric and intercostal recession with each act of inspiration. When this symptom is well marked it implies not only marked stenosis, but also it is a proof of powerful muscular effort, and this muscular effort rapidly exhausts the strength of the child, already suffering from a lack of oxygen. Intubation, therefore, should be done as soon as these symptoms are present. Fortunately, in the majority of cases it will happen that there has been a period of two or three days of more or less hoarseness, with a dry, croupy cough, with some labored breathing and sore throat, before these more urgent symptoms present themselves. During this period prompt treatment may avert the necessity for intubation, but after the four symptoms named are present, delay rapidly lessens the chances of recovery.

Intubation usually gives marked relief. In the first place, the child receives a larger amount of oxygen and evidence of cyanosis disappears, and in the second place it is relieved from the intense muscular effort put forth to pump air into the lungs, thus giving rest and saving strength. Often a few moments after the introduction of the tube the child falls into a quiet restful sleep. Should coughing continue for some moments after the introduction of the tube, I think it wise to withdraw it, when frequently a quantity of mucopurulent fluid is coughed up. The tube can then be inserted again, often causing very little irritation. In two cases I have found it necessary to remove the tube because of continuous coughing, when on the second introduction very little irritation was produced. In one other case respiration entirely ceased and the child quickly became cyanotic. On withdrawing the tube it was found completely occulated by a plug of false membrane, probably pushed down before the tube and sucked up into it. In a few moments the tube was again introduced without further trouble. These three

* Read before Missouri Valley Medical Society at Atlantic, Ia., March, 1896.

Digitized by Google

cases all ultimately recovered. I therefore always use the string, because in the last mentioned case death would have ensued before the tube could have been removed by the extractor. In one case, a girl of thirteen, the oldest patient I have ever intubated, the thread was not removed at all, for the reason that she refused to permit it. She was able to take fluid food and on the fifth day the tube was coughed up, the case making a recovery. This was a case of secondary laryngeal diphtheria following a case of primary diphtheria of the pharynx. After the tube is firmly in place and the spasmodic coughing has ceased, we may then withdraw the thread.

The next difficulty that confronts us is the act of deligation, and in my experience there is more difficulty in swallowing water than any other fluid. I am in the habit of giving these children thickened milk, made by the addition of corn meal gruel, and I am satisfied that they swallow with very much less difficulty and that less of the fluid enters the tube than when simple water is taken. The first attempt to swallow should be made with the child lying on its back and with the head lower than the body. In this position fluid will pass over the larynx much more readily.

I next wish to notice briefly the limitations of this operation. Intubation does not cure the disease, but merely relieves the laryngeal stenosis and permits air to more freely enter the lungs. In my experience, when intubation fails to save life, it is for two reasons: First, when the operation has been performed too late, after the child, as I have already indicated, is exhausted; when it is poisoned by carbonic acid and too thoroughly worn out to recuperate. These cases usually terminate fatally within a few hours after the introduction of the tube. The second and most frequent cause of failure is an extension of the membraneous deposit into the trachea, bronchial tubes, and air vesicles, producing, in a majority of cases, a true septic pneumonia. In all of the fatal cases which I have seen, except those dying within a few hours, I believe I have been able to demonstrate by a physical examination that death was due to involvement of the bronchial tubes and air vesicles. This complication usually follows cases of laryngeal stenosis not treated by intubation, and the fatal result cannot, therefore, be charged to the operation. As primary pneumonia is a serious disease, this secondary form is much more so for obvious reasons, and, as I have before stated, death from this cause is the rule in laryngeal diphtheria.

The technic of the operation is so fully and completely described in our text-books that I have no desire to take your time in going over that portion of the subject.

The length of time that the tube should remain in the larynx is important. Dr. O'Dwyer himself stated, in the year 1890, that the average time was five days. Since, however, the introduction of the antitoxin treatment of diphtheria the time has been very much shortened, and I now believe with proper treatment that from forty-eight to seventy-two hours is long enough. At the expiration of this time it is well to remove the tube, and if it be found that there still remains a considerable degree of the stenosis, that the respirations are labored, it can then be reintroduced. In all of the cases that I have treated (except when pneumonia followed) by the antitoxin injections, fifty-six hours has been a limit of time that the tube remained in the larynx.

I think it is important to look after the general treatment of the patient after intubation has been performed, and at this point I think we often err. As these cases are almost all of them diphtheritic in character the antitoxin is indicated, and the earlier it is used the better the prospect of recovery. Statistics thus far gathered show that while formerly less than 25 per cent of these cases recovered, at the present time the percentage of recovery is over 60 per cent. This remarkable increase is unquestionably due to the antitoxin treatment.

Another important adjunct in the treatment is the constant inhalation of a moist atmosphere. I believe this assists in softening and macerating the false membrane and enables the child to expectorate much more freely. I therefore, in every case of intubation, insist on having the child inhale an air saturated with steam. In addition, a combination of turpentine and carbolic acid may be added with good effect.

In conclusion, intubation is a life-saving operation. In true croup, when the urgent symptoms are present, let us relieve by intubation, use the antitoxin to hasten the disintegration of the membrane and neutralize the tox-albumins, a moist air to promote expectoration and keep the bronchial tubes free, a careful attention to the diet to keep up nutrition, and oxygen inhalations to relieve the cyanosis. By these means mortality from this terrible form of disease will be greatly lessened and many a child restored to life.

THE MEDICAL AND SURGICAL AGNOSTIC.

By H. G. WETHERILL, M. D.,

PROFESSOR OF GYNECOLOGY, MEDICAL DEPARTMENT, UNIVERSITY OF DENVER, DENVER, COLO.

You all know him. He exists everywhere. He never fails to appear at state, county, or district medical society meetings; often with a paper, but always ready with his "knownothingism" in some form or other.

He is a good fellow, bright, genial, easy-going, glib of tongue, fairly informed on matters in general, a skimmer of the current medical literature of the day, and of strong personality and opinions.

He was a worker in his early days (for he is no longer young), has a good following still, and his people believe in him implicitly.

He is a medical agnostic for three reasons: First, he has always been too easy-going to go

Digitized by Google

into anything in a thorough and scientific way, consequently he has always been superficial and disposed to generalizations. Second, he was as a young man a poly-pharmacist, and the reaction has carried him too far in the other direction, for he was always mercurial and lacking the "governor" such an engine must have to be at any time perfectly safe. Third, he has grown more fond of his ease as he has grown older, and may now be said to be too lazy to do anything with that detailed thoroughness his work requires, and he is content to let Nature work out her own problems without material assistance from him, opposing and ridiculing the work of his more enterprising neighbor, which, by nature and habits of thought, he is incapable of understanding.

The field of therapeutics has always been his "stamping ground," and he has stamped and ranted till he was exhausted and everybody about him too disgusted to dignify his tirade with a reply. These are the chaps who make it necessary for medical societies to put into their transactions a disclaimer of all responsibility for what the volume may contain.

"Drugs" served for many years as the objects of his attacks. He loved to tell how ineffective they were (in his hands), and consequently what a "delusion and a snare" for all doctors and patients.

Now he prates of the fallacies of modern surgery, it never seeming to occur to him that he is unfitted by disposition and predilection for the formation of a valuable opinion in regard to a matter about which he truly knows so little.

Unfortunately the poly-pharmacy and the *furor operativus* of the past and present afford a foundation for him to stand upon, but that he should use this platform for his extravagant denunciation is as unwisely irrational and extreme in its way as are the abuses he condemns.

Operations for appendicitis and for women's diseases excite him most just now, and he is engaged in telling the world what he doesn't know about these conditions and their cure. This would do little harm if it stopped here, but unfortunately he is the trusted adviser of some good people, whom his self-reliant, magnetic personality has hypnotized to the point of idolatry, so that they "prefer him drunk to another man sober" and will agree to nothing he does not suggest or endorse.

This agnostic is a very dangerous man, not because he is densely ignorant, but because he is relatively so and is utterly unaware of his limitations, though ever ready to point out those of other people.

Someone has well said that "The tragedy of today is not the tragedy of the criminal, but of the incompetent. It is the tragedy of the man who has the best intentions and the best character and a fair equipment for his work, but who has not a thorough equipment and cannot do the thing he starts to do in the best possible way. Society is crowded with half-equipped workers, with men and women who are honest and earnest, and not incapable, but who are not up to the level of the very best work."

Such people become agnostics, and because they cannot appreciate or understand the things which are beyond and above them, decline to believe them possible for others.

> "Our doubts are traitors,
> And make us lose the good we oft might win,
> By fearing to attempt." —*Measure for Measure.*

FETUS IN FETU.

By J. S. LEONHARDT, M. D.,
LINCOLN, NEB.

In the Medical Review for August, 1896, mention is made of a "five months' fetus developed in the abdomen of a young man." Such instances of *lusus naturæ* are interesting from both a sensational and a scientific point of view. One would hardly think that a bit of childish conversation between two innocent girls could possibly have any teratologic significance, but in the light of history such seems possible. A new baby had just arrived and the two sisters, tots aged say four and six years, were discussing the event:

"I wonder where all these babies come from?"

"Why, don't you know? Dr. J. fetches 'em."

"I didn't think Dr. J. had any babies!"

"You didn't? Why, he's just full of 'em!"

In days of old, when the gods were supposed to hold social intercourse with the people of the earth, mythology tells us that Semele, the mistress of Jupiter Olympus, inveigled the father of the gods into an irrevocable oath; he swore by the black waters of the River Styx that he would grant any request she might make. She asked that he embrace her as he used to embrace the beautiful Juno,—arrayed in his regal accoutrements and surrounded with all his celestial paraphernalia. He came thus to the erotic daughter of old Cadmus, but the unearthly splendor of the chief of the council of the gods was too much for Semele and she was consumed to ashes. Loth to sacrifice the fruit of his visitation, the infant was by some unique operation enclosed in the thigh of its father and completed the full period of gestation. It rendered him a little lame for several months and he named the child Dionysus for that reason,—better known in this day by the name Bacchus. Thus out of the mouths of babes and the romance of myth cometh forth an untimely wisdom.

In 1879 Dr. Robert P. Harris, of Philadelphia, had collected eight authentic cases of fetus in fetu. One was reported by Mr. Young in 1808 before the medical society of London. It was an acephalous male fetus found in the abdomen of a male child that lived till the ninth month. One was Fattow's double case, in which two fetuses were found in a seven months' fetus. Atlee's case of a girl aged six years, who discharged such an

Digitized by Google

endocyma and lived seventeen years after the event. Dr. Gaither's case of a female fetus in the abdomen of a girl aged two years and nine months. In 1868 Broca reported a case of pilimicturition that proved to be also a case of included fetus. Mr. Highmore, in 1814, reported a case of this kind occurring in one Thomas Lane, who died aged fifteen years and was found to have in his abdomen a female fetus weighing four and one-half pounds. Whether the case reported by Grivel, of Dresden, in 1805, in which a post-mortem on a woman eighty-three years old revealed a fetus, or the case reported in the *Lancet* for July 7th, 1827, in which a fetus was found in a sac attached to the sacrum of a new-born child, or the remarkable case of a child ejecting a fetus by the mouth during a severe attack of vomiting, have a place in this category of curiosities I am unable to determine. It is a bit singular, however, that these experiences should cluster around the beginning of this century, when the profession knew very much less about monstrosities, uterine neoplasms, mural and extra-uterine pregnancies, dermoid cysts, etc., than they now do; it is also plain that as our knowledge increases along these lines, instances of fetuses located in the nates, thighs, back, thorax, pharynx, etc., correspondingly decrease. The case of a parasitic fetus included under the skin of the neck of a new-born child, reported by Pinard and quoted in the *American Journal of the Medical Sciences* for September, 1893, seems to be a modern exception to this rule.

The death of the famous autosite, Amedee Bisseu, of Rouen (a full report of which constitutes the major portion of the first bulletin of the Ecole de Medecine de Paris), about 1805, and which is said to have excited as much attention as the return of Bonaparte from the Elba, did much towards clearing the field for an impartial investigation of such freaks. The necropsy was performed by a committee consisting of MM. Cuvier, Leroy, Baudelocque, and Jadelot; their report was made through Dupuytren. The subject was born during the stormy period of 1790. His mother was much agitated during her pregnancy and the child when born was very feeble. From the time he was able to speak he complained of a pain in the left side of his chest and abdomen. Spinal curvature was suspected until a tumor of large size made its appearance. He grew up, went to school, and became an expert horseman. In his fourteenth year the pain, that had never left him, became acute and was accompanied by fever. After seven days the tumor enlarged to the size of a melon (whatever that may mean), and showed in the lower part of the abdomen. He was bled and purged. The stools became fetid and puriform. About the third month he passed a ball of hairs about the size of a man's fist. Six weeks after this he died. The body being opened, there was found a sac attached to the arch of the colon, and communicating with it some balls of hair and an organized mass resembling in many points a human fetus. This cyst was attached also to the transverse colon, and had no apparent connection with the intestinal canal other than a recent rupture. Examination of the cyst proved it to be the involucre of a fetus. There was present a brain mass, spinal marrow, some large nerves, muscular tissue, bones of the spine, head, pelvis, and limbs, a very short umbilical cord attached to the colon. Nothing could be found to indicate the existence of an alimentary canal, organs of respiration or generation, nor kidneys. Considerable doubt as to his sex existed in the popular mind, some claiming that he might have been an imperfectly developed female, others that he might have been an hermaphrodite and therefore self-impregnated. The body was exhumed and these points of doubt settled. He was found to be a fairly well-developed male, without any trace of intrapelvic organs of generation. The phenomenon was explained, of course, and the explanation was about as scientific and plain as it would be to-day.

Such enclosed fetuses are not dermoid, since that kind of thing occurs either in the ovaries or testicles exclusively.

The "Unsurgeonlike Horrors" of Hunter's Time.—The *Clinical Sketches*, in treating of the days before chloroform, reminds one of the stern courage that then was demanded of surgeons. It remarks that in studying the histories of surgeons of a bygone age, we are frequently reminded of the horrors of their art before the days of chloroform. "It is not surprising to read that Abernethy 'had a most unsurgeonlike horror' of operations, and that both Cheselden and Hunter entertained similar feelings. Of Sir Astley Cooper's uncle William it is recorded that when about to amputate the leg of a man at the hospital, the patient, seeing the instruments being got ready, suddenly jumped off the table and hobbled away, whereat the surgeon expressed himself as greatly relieved: 'By Gad,' said he, 'I am glad he has gone!'"

Early Diagnosis of Pregnancy; Hegar's Sign.—Hegar's sign seldom fails to diagnose pregnancy as early as the sixth or tenth week. It consists in a change in the body of the uterus, which becomes spheroidal in shape and soft to the touch, while the neck retains its tenacity and shape until much later. The uterus is thus palpated as a round, yielding body mounted on the straight cylinder of the neck. In connection with the cessation of the menses, disturbances in the digestion, ptyalism, changes in the breasts, slaty appearance of the vagina, and vulva in a primipara and varicose appearances around the external genital organs and on the lower limbs, the diagnosis of pregnancy is certain in the great majority of cases.—*Lyon Med.*, No. 5.

Digitized by Google

Selected Article.

MODERN METHODS OF GASTROSTOMY.*

BY THOMAS F. CHAVASSE, M. D., C. M., F. R. C. S. EDIN.,

SENIOR SURGEON TO THE HOSPITAL.

GENTLEMEN: I propose to consider with you to-day some of the most recent methods of performing gastrostomy, an operation which must be regarded merely as a palliative measure, yet if undertaken for œsophageal carcinoma before the patient becomes too much enfeebled from starvation it has proved a means of prolonging life and adding considerably to his comfort. It must be borne in mind, however, that many practitioners still entertain a serious dislike to the procedure and prefer to resort to rectal feeding in the hope that death may result from some intercurrent disease, but only those fresh from the schools can be expected to be conversant with the improved conditions which have resulted from the modern methods of operating. Although the idea of gastrostomy originated with Egebert in 1837, yet English-speaking surgeons are indebted to Mr. Howse for having placed the operation on a practical basis, as in 1874 he suggested the plan of performing it in two stages, and delaying the second one, the opening of the stomach, until firm adhesions had taken place between that viscus and the abdominal wall. To carry out the first stage successfully various methods of suturing—the application of padded forceps, the use of hare-lip needles—have each their advocates. You may accept any plan as of practical value which brings and maintains in apposition sufficient areas of the visceral and parietal peritonea to form adhesions firm enough to allow the injection of food into the stomach through a tube; such adhesions once fairly formed will remain, and do not in my experience become absorbed and weakened as time goes on. As an illustration I will briefly narrate a case.

CASE 1.—A man aged fifty-five years was admitted into hospital on August 19th, 1887, with symptoms of malignant stricture of the œsophagus of six months' duration; the obstruction was nine inches from the teeth, but a small bougie could be passed into the stomach. The power of swallowing varied from day to day, but nothing but fluid food reached the stomach. The patient was kept under observation, but as his dysphagia manifestly increased, on October 10th the first stage of gastrostomy was performed, the abdomen being opened by a three-inch vertical incision over the left rectus muscle, its fibers separated, and the stomach secured to the parietes by three running silk sutures.† The opening of the stomach itself was performed three days later. Death took place on February 12th, 1888, the immediate cause being broncho-pneumonia. At the post-mortem examination the lower part of the œsophagus was found to be converted into a large ulcerating mass five inches long, involving the whole thickness of the tube, and, posteriorly, perforation into the mediastinum had taken place. The upper limit of the ulcerating mass was opposite the bifurcation of the trachea, which was involved but not absolutely perforated. Secondary growths were found in the posterior mediastinal glands, in the right lobe of the liver, and in both kidneys. Microscopically the neoplasm was a squamous epithelioma. The adhesions between the anterior wall of the stomach and the abdomen round the fistula were very fibrous.

The principal inconvenience experienced by this patient, as well as by others who have lived for some weeks after the operation, was the leaking from the fistula, especially when digestion was in progress; as a result the skin for some distance round the opening was in a condition of chronic eczema very troublesome and distressing to the individual. Many forms of applications, oleaginous, powdery, and watery, were tried and proved of little real value. This leaking of the stomach contents has nearly always to be reckoned with to a greater or lesser degree when the gastric fistula is freely used for feeding purposes, and it is an objection which with the older plans of operation had to be borne in mind when the advisability of the operation had to be pressed upon the patient, his relatives, and friends. Many devices, more or less ingenious, have been suggested to obviate this serious defect, and in recent years several continental surgeons have exercised their inventive powers and practical skill in endeavoring to overcome the disadvantage. We will consider them in the following order: (1) Hahn's method, 1890;* (2) Oscar Witzel's method, 1891;† and (3) Albert's method, 1892.‡

Hahn's Method.—The abdomen is opened by a transverse incision below the ribs and, the stomach having been exposed, a second incision is made in the eighth left intercostal space, through which the organ is drawn out and fastened between the cartilages; it is then opened. The idea is that the ribs will act as a stopcock and so prevent leakage. In the only example I have seen of this method this end was not attained during the ten days the patient survived the operation, and it certainly appeared to me to give rise to more pain than the ordinary operation; it is also possible to wound the pleura or the diaphragm, or a necrosis of the cartilages may subsequently supervene.

Witzel's Method.§—The primary incision commences in the middle line, a finger's breadth below the left costal cartilages, and is carried transversely outwards for three or four inches. The rectus muscle having been laid bare, its fibers are separated by the handle of the scalpel, held apart by retractors, and the peritoneal cavity opened. A portion of the stomach is now drawn outside, packed round with warm sponges, and opened on its anterior surface by a small incision placed near its cardiac end, sufficient to permit the introduction of a fair-sized drainage-tube. The tube should be about five inches long and about one inch of it should be inserted into the cavity of the stomach and anchored there by two or more sutures which penetrate the muscular and peritoneal coats of the organ and the India rubber tube so as not to open its caliber. Silk sutures are next passed half an inch from the tube through the muscular and peritoneal coats of the stomach, over the tube and through the corresponding coats on the other side of it. From four to six sutures may be so inserted, but all should be passed before any tying is attempted. (Fig. 1.) When this is done the tube will be found encased

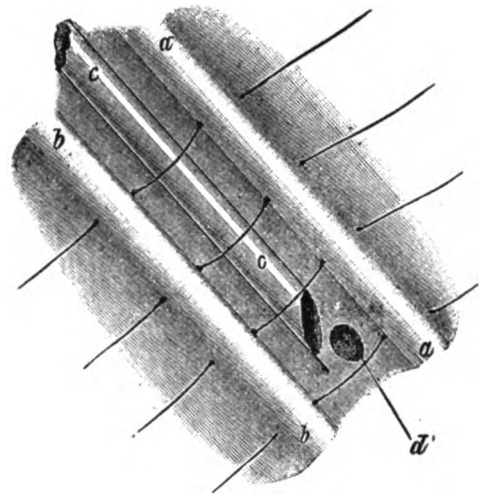


FIG. 1.—*a*, *b*, Parts of anterior wall of stomach to be approximated over *c*, rubber tube. *d*, Opening made in stomach wall for insertion and anchoring of tube.

in a peritoneal funnel except at its upper part. If necessary, other superficial sutures may be added between the deeper ones. The effect produced is shown in Fig. 2. Four or five silk sutures on either side are next employed to secure the viscus to the cut edges of the abdominal wall, and the wound is lightly packed with iodoform gauze. If deemed necessary, milk or other nutriment may now be injected through the tube, but it is preferable to wait twenty-four hours, when some adhesions will have formed.

CASE 2.—A man aged forty-six years was admitted to hospital on March 15th, 1894. There was a history of syphilis, and marked symptoms of dysphagia had existed for three months. A large mass of infiltrated gland tissue was evident on the left side of the neck and the body was much emaciated; the obstruction was about eight inches from the teeth. Witzel's operation was performed on March 20th, the tube being anchored to the opening in the stomach by two catgut sutures, and six silk sutures were employed for folding the organ over the tube (the size of the tube was No. 14, Ingram's

*A clinical lecture delivered at the General Hospital, Birmingham, England, on June 5th 1896.

†The Lancet, February 20th, 1886.

* Centralblatt fur Chirurgie, 1890, vol. XVII, p. 193.

† Ibid., 1891, p. 601.

‡ Wiener Klinische Wochenschrift, 1893, vol. VI, p. 231.

§ Figs. 1 and 2 are taken from the author's paper.

Digitized by Google

make); four silk sutures on either side secured the organ to the parietes. Owing to the condition of the patient feeding by the tube was commenced the evening of the operation. On the third day the tube was found loose in the dressings, and some difficulty was experienced in replacing it in the stomach, two of the lower infolding stitches having to be removed for the purpose and then reinserted. On the fifth day symptoms of pneumonia appeared, and although he was fed and stimulated freely through the tube he sank and died from heart failure on March 28th. The pathologist's report shows that the stricture of the œsophagus commenced at the upper margin of the cricoid cartilage and extended downwards two and a half inches; below this point the gullet was collapsed. The tumor in the neck was also carcinomatous, and between it and the pharynx a small abscess existed; no other secondary growths were found. The heart was small, flabby, and atrophic. The drawback in this case was the escape of the tube from its moorings on the third day, due to the speedy absorption of the catgut, and its re-introduction proved a matter of some little difficulty. The employment of catgut as a suture was evidently a mistake and I resolved to substitute strong horsehair on the next occasion. The specimen, which was exhibited at a meeting of the Midland Medical Society,* showed the funnel-shaped opening into the stomach to be well-

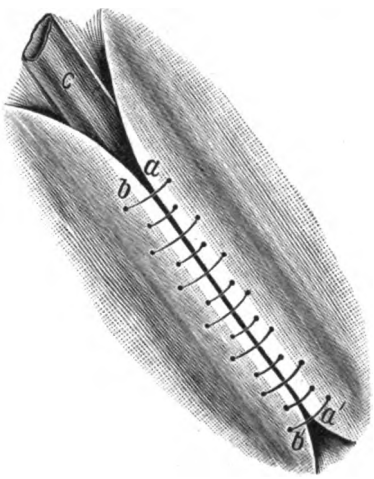


FIG. 2.

established and readily permitted withdrawal and introduction of the tube.

CASE 3.—A man aged fifty-nine years was sent into hospital on December 10th, 1895, by Mr. Whitehouse, of Solihull, owing to difficulty of swallowing, prominent symptoms being first noted three months before accompanied by loss of weight (on admission this was 8 st. 8 lb. normal 11 st. 7 lb.). An obstruction was evident in the œsophagus eleven inches from the teeth. For some days the patient was kept under observation, and it was found that sometimes liquid food passed into the stomach, but that on other occasions everything taken by the mouth was returned. On December 20th gastrostomy according to Witzel's method was performed. The tube was anchored to the stomach aperture by three horsehair sutures and to the edges of the skin at the top of the incision by two silkworm-gut sutures. The infolding sutures were seven in number and the viscus itself was secured to the edges of the parietal incision by four silk sutures on either side. Iodoform gauze was then packed round the tube. The operation was well borne; there was no rise of temperature following it, practically no pain, and all vomiting ceased. Feeding through the tube was commenced next day. The tube remained *in situ* until January 6th, 1896, when it was found loose, so I removed, cleaned, and replaced it in the stomach without any difficulty. When the organ was filled there was no leaking of its contents and nothing was expelled on coughing. On January 25th, the wound having healed round the tube, an abdominal belt with a small turning-down flap in the region of the tube to readily permit feeding was fitted and the patient got up. He was retained in hospital until February 8th in order that the effect of the upright position and of exercise might be observed. As no leaking and no other inconvenience resulted he left the hospital on that date. His weight then was 8 st. 3 lb. In answer to my inquiry Mr. Whitehouse kindly informs me that death took place on May 18th. He goes on to say: "The gastric fistula was certainly a success, the patient usually taking three pints of milk a day, with eggs and whiskey beaten up in it. The tube fitted very well all through; there was no leakage or soreness of the surrounding skin. His wife removed the tube daily, and she tells me she never had any difficulty with it. The growth increased considerably before death and involved the trachea." He also tells me that after leaving the hospital the man had a sharp attack of influenza, with congestion of one lung, and that the feeding and stimulation which the fistula permitted were the means of tiding him over that difficulty.

Contrasting this case with No. 1 the advantages it shows are that the patient was fed the day following the operation (and might have been the same day), that he was able to return to his home and his wife at once took up the artificial feeding successfully, that there was no leaking of the contents of the stomach, and no consequent soreness of the skin round the opening, so saving much physical discomfort. This method has been suggested to be very applicable to cases in which a temporary fistula is needed, as it could certainly be closed if required, and in tight fibrous strictures of the gullet it might be utilized in an attempt to dilate the stricture from below upwards.

*Albert's Method.**—An incision, two fingers' breadth below the margin of the left ribs, is carried downwards and outwards over the rectus muscle for three or four inches, and its fibers having been exposed are separated vertically towards the inner edge of the muscle by the handle of the scalpel or some blunt instrument. The peritoneal cavity having been opened, a sufficient portion of the stomach to reach the costal cartilages is drawn out of the abdomen. It is then anchored in that position by stitching with continuous or interrupted silk sutures on each side the serous and muscular coats of the organ to the parietal peritoneum and the posterior layer of the rectal sheath (Fig. 3). Through the skin at the level of the costal cartilages, about one inch from the outer edge of the wound in the parietes, a small incision, half an inch long, is made, and a bridge undermined between this and the primary incision. Under this subcutaneous bridge the extruded portion of the stomach is drawn upwards (Fig. 4), and a small

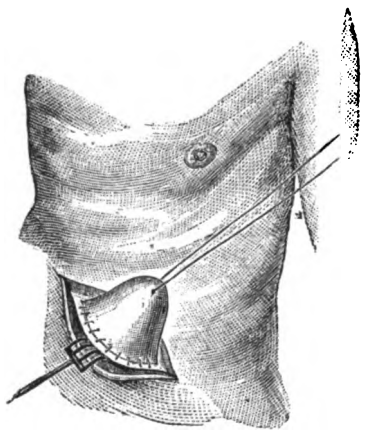


FIG. 3.

opening having been made into its cavity by incising its anterior wall the edges of this mouth are secured by four or more fixation sutures to the edges of the small skin wound (Fig. 5). The first incision in the abdominal wall is then completely closed. As a result of this procedure a portion of the stomach becomes subcutaneous, is bent upwards, and forms a sort of artificial œsophagus, the base of which is gripped by the muscular fibres of the rectus which act as a sphincter.

CASE 4.—This patient, a man aged fifty-four years, was admitted to the hospital on May 6th, 1896, with a history of dysphagia of twelve months' duration. Since Christmas no solid food has passed into the stomach, as it was rejected as soon as taken. For nine days before admission everything was vomited. The obstruction in the gullet was nine and a half inches from the teeth. His weight was 9 st. 7 lb. (normally 11 st. 3 lb.). On May 8th Albert's operation was performed, a three-inch vertical incision being employed and the fibers of the left rectus muscle separated. The stomach was found to be somewhat small and contracted. Two sling sutures of silk a quarter of an inch apart were inserted into the anterior

* The Lancet, April 28th, 1894.

* Paper and diagrams by Dr. Rudolf Frank in the Wiener Klinische Wochenschrift, 1893, No. 13.

Digitized by Google

wall of the organ for the purpose of traction. Four interrupted silk sutures on each side were employed to secure the stomach wall, the parietal peritoneum, and the under surface of the sheath of the rectus. The edges of the peritoneum below the opening were approximated by interrupted sutures and the edges of the skin brought together over that portion of the viscus outside the peritoneal cavity. The undermined

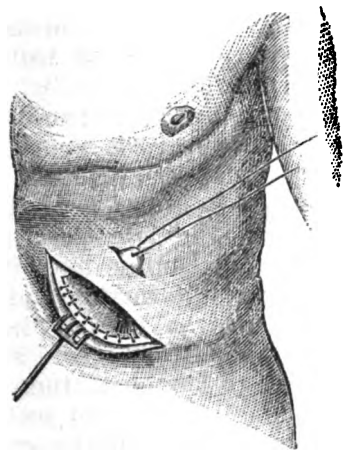


FIG 4.

bridge of skin between the small opening over the costal cartilages and the upper part of the abdominal incision was one and one-eighth inch wide, and a good deal of traction was kept up by my colleague, Mr. Heaton, who kindly assisted me, in order to keep the organ fixed in position until the six silk sutures employed to connect it to the opening in the skin were inserted. The sling sutures were left *in situ* and the stomach was not incised. The patient was somewhat collapsed for two hours after the completion of the operation, but rallied after nutrient enemata had been administered. For the next two days constant nausea and a marked tendency to vomit existed, although the patient was fed by the rectum. On May 11th the stomach was opened between the sling sutures, which were then removed, and feeding by the catheter commenced.

You now see that when the feeding-tube is introduced about the breadth of the skin bridge a little puff of gas takes place as though a sphincter had been passed through; that about three-quarters of a pint of milk or other fluid food can be injected, and when the tube is withdrawn and the patient coughs violently or turns on to his left side there is no escape of the contents of the stomach. If more than three-quarters of a pint be employed it seems to exceed the limit of the present capacity of the organ and the injected food at once returns. You may have seen two other cases of this method at present in hospital; both have proved satisfactory as regards no stomach leakage. Such a distinguished surgeon as Professor Kocher* states that after testing various plans he has come to

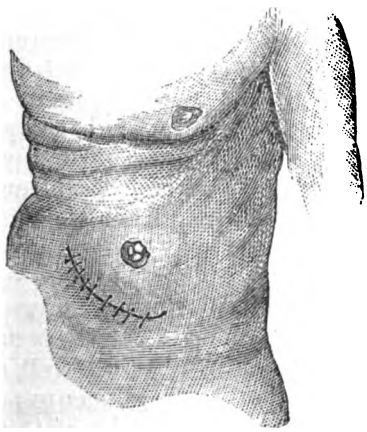


FIG. 5.

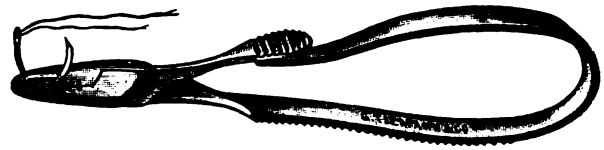
the conclusion that Albert's method is the simplest and most reliable. Dr. Willie Meyer,† of New York, also believes that this method will become the standard operation for malignant stricture of the œsophagus, especially if the tumor is situated above the cardia. If the plans advocated by Witzel and Albert respectively are compared, one operation is as readily performed as the other, but in the latter (Albert's) cases occur in which some difficulty will be encountered in drawing the stomach forward and upwards, owing to the cardiac end of the organ becoming more or less fixed by the neoplasm. Certainly more gastric and general disturbance follows its performance than in Witzel's, due to the necessary traction on the stomach wall. The opening into the viscus is also apt to contract somewhat under the bridge of skin. When complete, however, it has the advantage over Witzel's method in that no tube need be worn. I have had no opportunity of testing whether it would be possible to discard the tube in a Witzel when the funnel is fully established, but Professor Keen,* of Philadelphia, states that in a case under his care he tried to remove it temporarily, but had to abandon the practice owing to the difficulty of its re-introduction. It would be more difficult to close the fistula if required in an Albert than a Witzel, but then in most cases the operator desires the opening to be permanent. Both methods give satisfactory results as regards leakage, thereby saving much physical discomfort to the unfortunate patient, and both are very distinct advances on the older methods of operation.—*The Lancet.*

*Text-book of Operative Surgery, second edition, translated by Stiles.
† Annals of Surgery, vol. XVIII, p. 558.

*Annals of Surgery, vol. XVIII, 1893, p. 638.

A NEW SELF-CLAMPING NEEDLE HOLDER.—Dr. William L. Bradley described a new self-clamping needle holder before the alumni association of Bellevue Hospital, a cut of which we give.

It is composed of two pieces of highly tempered steel of different sizes. The larger piece of steel is so bent upon itself as to rebound when the two parts of the curve are made to approximate one another. It is this part of the instrument which gives it its self-clamping power. This power is obtained by having the tip end of this curved piece of steel constantly press under the



posterior extremity of the smaller piece. The smaller piece of steel is locked to the larger piece by a pivot working in a depression on this larger piece of steel. There is a groove leading to this depression which aids in the separation of the two parts of the instrument for purposes of cleaning, etc. That part of the needle holder which is grasped by the hand is corrugated so as to give the operator perfect control of the instrument. The jaws are grooved for different-sized needles. The advantages alleged for the instrument are: (1.) The constant pressure which is always exerted on the needle the moment the spring is released. (2.) The ease with which needles are relased from its grasp. In many of the needle holders now in use an enormous amount of pressure is brought to bear upon the needle in order to release the same. (3.) The simplicity of the instrument both in detail and working. The needle holder is made up in different sizes to suit the various kinds of surgical work.—*New York Medical Journal.*

IT IS, INDEED.—Ex-baby: "Mamma, where did the baby come from?" Mamma: "From heaven, my darling." Ex-baby: "It's a pity the kid didn't know when it was well off."—*Fiber and Fabric.*

Digitized by Google

Stray Thoughts.

WHITHER are we drifting? Are we leaving the old beaten paths that were made by the fathers of medicine to take up and make new and heretofore unexplored ones? Are we to throw aside all the experience of the past and start anew, as though none had ever gone before us? Has the microscope, with its wonderful revelations, opening up the world of life in the infinitesimal world, made all the work of the past merely a foundation of sand, to be washed away by the merest freshet of modern investigation? Must we burn up all the books our older men have prized so highly and make a new start on different lines and with different methods? These and similar questions will come up as I read and think of the changes which are taking place in our methods and work. And as I think of these changes the question that comes up oftenest and remains longest unanswered is, "To what good?" Still the young die. The strong and middle-aged pass away before their time, and the old folks seldom make their exit by the true way—euthanasia. Our older men treated consumption with cod-liver oil and built up the constitution till death came. We of modern, advanced ideas were going to cure consumption by the Bergeon method, by injecting, per rectum, hydrogen gas, but it did not save. And then other fads were taken up till Koch, with his tuberculin, was hailed as a second savior, and the world, the whole civilized world, went wild for a few months, until it found that consumptives continued to die in the same way. And this passed away to give way to other "sure cures." But still the hearse goes to the cemetery just as often. Typhoid fever, with all its specific cures, is yet doing its share to relieve the over-congestion of all departments of human life. And diphtheria—but I won't get pessimistic. Possibly—probably—we are "getting there," but we have not "got there" yet.

* * *

FOLLOWING close in the footsteps of the "new woman" is her more useful sister, the "new nurse." The genuine, well-trained, honest, conscientious nurse is a godsend to humanity and a boon to the physician. Her quiet, serene face, illumined with a smile of gentle sympathy—for a sympathetic smile is a possibility, but only in a trained nurse—makes the sick-room a chamber of rest and the hard bed of illness a couch of down. The true trained nurse is a solace in sickness and a comfort in calamity. She is an angel, but with well-trained muscles instead of seraphic wings. But the "new nurse?" Well, that's different. She is not very numerous yet, but, judging from the London *Practitioner*, she is quite in evidence across the water; in fact, she is occasionally met with here. Says the *Practitioner:* "The new nurse waxes fatter and fatter every day, figuratively speaking, and 'kicks' more vigorously. Her tastes are strongly surgical and she has a scarcely concealed contempt for the general practitioner. Even the hospital physician is made to feel that his attempts to hide his ignorance do not impose upon her. If his cases recover, the credit is hers; if they do not, the fault is his," etc. And then the *Practitioner* tells us of the different things the new nurse wants. And their name is legion. She must study anatomy in all its ramifications, and physiology with all its theories, making of her "a lower order of medical practitioner, who may be useful or who may be dangerous, but who in any case is superfluous." She is not satisfied with being able to nurse and confine herself to that department, but she must go further and instruct the physician and the surgeon, not only in the science, but in the art of his calling. And if his science or art come not up to her ideal, then woe to him. She will not be at all backward in letting those around her know what she thinks, and if she is a little progressive—one of the newer of the new, as it were—she will not be at all backward in telling the doctor himself what he ought or ought not to do. There is one blessing about all this, and that is that she cannot make her calling and election "sure" without the consent of the doctor—that is, not always.

Now I hope the trained nurse will not feel bad and think that I am libeling her, because I am not. The "new nurse" and the "trained nurse" are two entirely different and distinct types. The "new nurse" bears the same relation to the "trained nurse" as the "new woman" bears to the true woman. Each is out of her true sphere of usefulness, and each wants to be something different from what she is.

* * *

THIS is the month in which the majority of the medical colleges of the country open their doors to the army of young men and women who have decided to make the practice of medicine their life work. To the new medical student this is a doubly important epoch, first, because it is the beginning of a life work,—the casting of the die of the future; and second, because it depends more upon the school he attends than upon anything else, except his innate ability, whether his professional life shall be successful or otherwise. While water never rises higher than its source, a medical student may rise higher, professionally, than his teacher or teachers, but he seldom does. We have in the United States a large number of first-class medical colleges, with faculties made up of gentlemen, honorable and well qualified to fill the different chairs they occupy; gentlemen who are living examples to be patterned after; gentlemen to whom the student refers with pride and good feeling in his after life. These schools are equipped with all modern appliances and material to teach modern, up-to-date medicine in the broad acceptation of the term. Their rules are

Digitized by Google

possibly strict. They require a good education in their students before admitting them as such; and their prices may be high. On the other hand, there are more colleges of a decidedly different kind. Organized by men for purely selfish motives, they are run with one purpose only. The faculties of these schools are made up of gentlemen who, if not inferior, are not above the very ordinary practitioner, and are taken into the faculties for a financial or a policy consideration, and not because they are endowed with ability to fill the chair they are to occupy. Such colleges are organized by a few physicians who are anxious for the empty honor of being styled "professor," and for the reputation that is supposed to go with a college professorship. Without appliances or material to teach modern medicine, and with a faculty of mediocral ability only, the college issues its annual catalogue, which contains high-sounding promises and artfully worded baits, including low prices, to catch the unsophisticated student.

If, before deciding in which of these two classes of schools he should enter, the student should ask his preceptor's advice, and should get the right kind and act up to it, what a difference it would make in that young man's future life and usefulness! How many professional lives are blasted by the simple mistake of making a wrong selection of a school at the start. Young man, don't do it. If you cannot afford to go to a good school now, put it off till you can. I know you will say that you will go to a better school after awhile, but you won't. Others who have started in a cheap school stay at a cheap school, graduate at a cheap school, and having been made a cheap doctor, remain a cheap doctor through life. And so will you. Young man, don't. Again let me repeat, water never rises higher than its source.

Esculapius.

Limits of the Art of Surgery.—Those of us who may represent a newer generation of workers in the surgical field, and who are aware of the comparatively narrow confines from which surgery has but so recently issued, may hardly realize that there are still many limitations to an art that is daily making such progress towards being considered as an exact science. The paper by Dr. Nicholas Senn, of Chicago, at the last meeting of the American Medical Association, is one that may well cause us to ponder and reflect.

In special departments of surgery, at times, we see an unreasonable readiness to operate with too great a haste and without sufficient cause. Operative surgery, in nearly all its branches, is often carried to extremes.

In tubercular diseases of the joints it has of late been realized that early arthrectomy will not always succeed in eliminating the local affection and in preventing its extension to distant organs by reinfection from the peripheral focus, and hence more conservative measures have largely taken the place of operative treatment.

In malignant tumors we are still ignorant of the essential cause of carcinoma and sarcoma, and until their true nature is divulged we can scarcely expect to make much progress in their treatment. Early and thorough operation is the only measure that offers chances of success; yet, taking the treatment of malignant disease as a whole, we must acknowledge that the measure of our success is small, and that in this respect we still move within very narrow limits.

In the treatment of intra-cranial lesions, we have certainly made great progress. We can diagnose with greater certainty and operate with greater accuracy than of yore. Yet our efforts are limited to operative interference in the treatment of certain fractures of the cranial vault and of a few lesions and tumors. In this field cerebral localization and aseptic surgery have permitted us to do a great deal; yet we often must feel that we are as yet groping in the dark, in the presence of the many and puzzling conditions that are so often met with.

Within the abdomen the gynecologist has certainly acted as though he were bound by no limitations whatever, but in the intra-abdominal surgery that deals with inflammatory and malignant diseases of the viscera, great progress is needed before we can congratulate ourselves upon the perfection of our achievements. Notwithstanding the wonderful improvements in the technique of operations upon the stomach, partial gastrectomy and pylorectomy have yielded anything but encouraging results. In nearly fifty per cent of the cases the patients subjected to radical treatment for malignant disease of the stomach succumbed to the immediate effects of the operation. In only one case out of nineteen in which Dr. Senn had opened the abdominal cavity for the treatment of malignant disease of the stomach had he found the disease limited to the organ first affected, and in this case the general health of the patient had been so much deteriorated by the obstructive pyloric carcinoma as to contra-indicate a radical operation.

In the surgery of the organs of generation, there certainly are limits, and decided ones; but, according to Dr. Senn, the trouble is that many surgeons are not stopped by them. They operate too readily, too frequently, too indiscriminately. Many operations are performed upon women and fail to give the expected relief in quite a number of cases. Ovaries are removed unnecessarily in some instances, since many healthy ones are shown by the operators as results of their procedures. While gynecology as a science is responsible for much good, and while our acquired knowledge is bound to prove of the greatest value to future sufferers, it behooves us to operate with greater discrimination and caution.—*Editorial in International Journal of Surgery.*

If you think the Western Medical Review is a good thing, push it along.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$2 00
Single copies..... 20

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, SEPTEMBER 15, 1896.

THE British Association for the Advancement of Science, one of the greatest scientific organizations in the world, will meet in Toronto, Canada, next summer. A large number of the leading medical men of England belong to this association, and an effort is being made to arrange this and the British-Canadian Medical Association meetings so that both can be attended without loss of time in the interim. Again we ask, cannot the American Medical Association meet about the same time? What a feast! The American Medical Association, the British Medical Association, the Canadian Medical Association, and the British Association for the Advancement of Science, all in a couple of weeks. Why not?

SOME months ago the *Medical Record*, of New York, contained an elaborate and laudatory article on a new treatment of consumption by Dr. Edson of that city. The paper was written to show the wonderfully good results obtained by using a new remedy, to which the author gave the name of aseptolin. Abstracts of this paper were published in different medical journals, and the physicians of the country who read the article were ready to accept the claims made for the new treatment, on account of the reputation and standing of the writer and of the paper in which the article was published. But it did not take long for the profession to realize that there was an African in the woodpile, and that a nice piece of free advertising had been done for another proprietary article. That the *Medical Record* was beautifully worked goes without saying, for no one believes that Dr. Shrader would allow such a paper to appear in the scientific department if it were a paid advertisement.

Now, following so shortly after, comes another nicely worked advertisement, but this time it is in the *Journal of the American Medical Association*. In the number for August 15th a paper is published on "A New Treatment of Phthisis," by Dr. H. W. Mitchell, of New York. After devoting five columns to a text-book descriptive of phthisis, in which nothing new—of the remedy—is said, less than a column is devoted to the "treatment," which consists in the use of a "fluid" to which the author, with great modesty, applies the term, "Mitchell's Fluid." And he tells of the wonderful success he has had with it, and believes, or professes to believe, that he has at last discovered a real cure for consumption. And he ends the article by giving the formula for the "fluid." The composition of the "fluid" is as follows:

Sodic hypochlorite	7 grams.
Potassic hypochlorite ...	7 grams.
Magnesic chlorid	1.5 grams.
Calcic chlorid	2 grams.
Hydric chlorid	2 grams.
Chlorin	5 grams.
Potassic sulphate	1.5 grams.
Magnesic sulphate	.5 grams.
Aqua	1,000 grams.

Sodic carbonate, potassic carbonate, equal parts added in sufficient quantity to bring the solution to the proper degree of acidity.

Having read the article, one cannot help but be impressed with the idea that there may be something in it, and thinks he will try it. But if he is foolish enough to write out the prescription and send it to his pharmacist, he will be laughed at by the latter, for no pharmacist can compound it. We wrote to the author for information, and, as we expected, the reply came back that "Mitchell's Fluid which you refer to cannot be made by a druggist, for the reason that it requires skilled chemical knowledge and costly chemical apparatus. * * * For the treatment of pulmonary phthisis it requires to be taken very regularly for long periods of time, say not less than six months." And the further information is given that it will be supplied in eight-ounce bottles at $1.50 per bottle. Considering that "I give the fluid in from two to three-dram doses, clear, four times daily," and this for at least six months, it will be seen that there is going to be no small number of dollars spent for "Mitchell's Fluid" for each case. Without making and further comments, we cannot help remarking, *sotto voce*, that such an advertising article, evidently such on its face, should be allowed in the columns of the organ of the American Medi-

Digitized by Google

cal Association, even if the association itself had to be inflicted with it, is not in accord with our views of ethical medicine, at least. The American Medical Association cannot tell beforehand what a paper is till it is read, but there seems to us to be no excuse for such an advertising article to be published in the journal of the association, just because it has been read.

In the same issue of the *Journal* is a paper by Dr. Paul Paquin, of St. Louis, on his method of cure by sero-therapy. Before this was published that gentleman sent to the medical journals a reprint of that article and asked them to use the paper, or abstracts of it, as was seen fit. And not a few of the journals are doing it.

Now if Mitchell's Fluid, Aseptolin, and Paquin's serum, all proprietary remedies, practically, made and pushed for the money there is in it, are to be advertised free in the reading columns of our medical journals, why not Antikamnia, Antiphlogistine, Neurosine, and other proprietary articles? Business is business.

THE AMERICAN-CANADIAN-BRITISH MEDICAL ASSOCIATION.

At the last meeting of the British Medical Association the invitation of the Canadian Association for the parent branch to meet with them next year at Montreal was accepted. So the British Medical Association will for the first time meet on this continent next August. Commenting on this, the *Journal of the American Medical Association* says:

What can we do to make the visit to America of our English confrères more enjoyable and useful, and to aid in deepening the professional unity, respect, and affection which these two parts of our guild entertain for each other? Two things are prerequisite: The first is the establishment of a committee to take in charge the entertainment of our British and Canadian friends, and the second is the securing of funds to defray the necessary expenses.

To this end we suggest that the proper officers of the American Medical Association at once appoint three members from the association to act with three members to be appointed by the executive committee of the Congress of American Physicians, the six to organize themselves as they may deem best and to have entire charge of the collection of funds and the plans and execution of the same for the entertainment, etc. As to the subscription, we have no doubt sufficient contributions can be obtained from the various medical organizations of the country, or even from private persons (the writer will give $25). We should be moved by every honorable motive to make the American tour of our visitors one of the most enjoyable and profitable for all concerned. But there should be no delay in getting to work.

This is all right as far as it goes and we are willing to give $10 for the cause and accept any amount that our readers may desire to contribute and acknowledge it through the WESTERN MEDICAL REVIEW. But why not go further? Why not make of this a Pan-English speaking medical congress? What a magnificent gathering of English-speaking medical men we can have if an effort is made in the right direction. Every year many of our English confrères come across the Atlantic to meet with the American Medical Association, and in like manner, only more so, our professional brethren from this side go over there to attend the meeting of the British Medical Association. Now, why not ask the profession of England to meet with us also? Why not tell them that we are anxious to have them meet with the American Medical Association while they are here, and for this purpose we will delay our meeting if the Canadian friends will put their meeting a little earlier? Is there any reason why the American Medical Association should meet the first week in June? Is there any reason why the Canadians should meet in August? Let the American Medical Association put off their meeting a month and the Canadian Association put theirs a month earlier, more or less, so that only a day or two shall intervene between the two meetings, and then it will give all a chance to attend both meetings. The two places of meeting are only a comparatively short distance apart. Such a temptation could hardly be resisted by our English brethren, and many who would not think of coming across for the one would be glad to come for both. And not only our English friends, but our English-speaking confrères from Australia and other British colonies would take advantage of such a meeting or combination of meetings. When one comes to think what it means to have a gathering of all English-speaking physicians, one wonders if such a thing is possible. It certainly is in this instance. If a Pan-American Congress is a good thing, where a half-dozen languages, more or less, are spoken, and where two-thirds of those present cannot understand what the other third is talking about, how much more good would such a gathering be as the one we propose? And again, we of the west would like to attend the meeting this next year. It being a semi-centennial

Digitized by Google

meeting, we shall want to be there, all of us. If there can be added to the noted men of this country who we know will be at the meeting the noted men of England and her colonies also, there will be a still greater desire on our part to be there. Let us make a week or ten days of it while we are about it. Give us a chance to attend both meetings at the same time. There are very few of us who can hope to go east twice in one summer, and some would prefer to attend the Canadian and British meetings combined rather than the American, and all, we are sure, would like to be at both.

Let us have such a meeting or meetings of the English-speaking medical profession next year that will astonish the world. Let us have such a meeting of the English-speaking medical profession that shall be so good that it shall result in the organization of a permanent Pan-English Medical Congress. "'Tis a consummation devoutly to be wished."

Notes and News.

Dr. Gilles de la Tourette has been appointed physician-in-chief to the Paris exposition to be held in 1900.

Dr. H. B. Lowrey, of Lincoln, has been appointed delegate from Nebraska to the Pan-American Medical Congress of Mexico.

It is reported that Dr. Bonnar, of Chesley, Ontario, has been offered the chair of anatomy in Rush Medical College.

The Equitable Life Insurance Company, of New York, has increased the fee for medical examinations back to the old price, $5.

Dr. Clayton Parkhill has been chosen dean, and Dr. Howard T. Pershing secretary of the Colorado State Medical College.

Dr. H. C. Crowell has been elected professor of clinical gynecology in the University Medical College, of Kansas City, Missouri.

Sir Spencer Wells having resigned the position of surgeon to the household of the queen, Mr. Rickman J. Godlie has been appointed to the vacancy.

Dr. C. H. Hughes, of St. Louis, has been appointed honorary president of the section of neurology and psychiatry at the Pan-American Medical Congress. Those who intend to present papers to this section should write to Dr. Hughes.

The new building of the Chicago Post-Graduate Medical College is nearing completion. It is an elegant structure, well arranged for the purpose for which it is being built, and is a credit to the gentlemen connected with the school, as well as to the city of Chicago. It is situated on the corner of Dearborn and Twenty-fourth streets.

The country doctor in France is now using the horseless carriage. But the country doctor of France does not have to ride over the same kind of roads as the country doctor in the western states of America, or he would not use a horseless carriage.

Abraham Slimmer, of Waverly, Iowa, has made an offer to the directors of the Finley Hospital, Dubuque, Iowa, to endow it with $50,000, provided the citizens of Dubuque will raise an equal sum, or, if the trustees cannot raise that amount, he will give $25,000 on a similar condition.

The Women's Medical College, of St. Louis, is to be closed. Some jealous ones intimate that it is because the Missouri State Board of Health is too exacting in its demands. If this board keeps on in its unjust exactions there will not be over a score of medical colleges left in the state in another year.

The Colorado State Board of Health is now recommending the regulating, or exclusion, of consumptives in that state. Heretofore the people of the Silver state—this is not politics—have been doing all they could to advertise it as a great health resort and climate for consumptives. Some people never seem satisfied.

In Hungary only qualified medical men are allowed to practice dentistry, and there is no licensing or examining body that has power to grant a license to practice it. Recently an effort has been made looking to the recognition of foreign dental diplomas, but without success. So that at present to practice dentistry in Hungary one must have not only a degree in dentistry, but the M. D. degree also.

Statistics reveal the fact that there is a remarkable difference between the sexes in regard to color blindness. Over three and a half per cent of men are color blind, but not more than two-fifths of one per cent of women are so afflicted. The difference of perception of color will be declared by most men who have been sent by their wives to match ribbons or dress goods as under rather than over-stated.

It is the rule of the British Medical Association to elect as president a gentleman residing in the city in which the next meeting is to be held. This honor has been conferred on Dr. T. G. Roddick, of Montreal, the place of meeting of the association for next year. Dr. Roddick is professor of surgery in the McGill University, and consulting surgeon to the Royal Victoria Hospital, Montreal. He is also a member of the Dominion Parliament, one of the leading surgeons of the Dominion, and is held in high esteem by all, professionally and socially.

Digitized by Google

THE medical faculty of the University of Jena conferred the title of M. D. *honoris causa* on Prince Bismarck on July 20th. We are not informed whether Dr. Bismarck will hang out his shingle or not, but probably he will not. We welcome him to the ranks of the medical profession. He deserves the title of doctor now, surely, as he is a doctor of laws, doctor of philosophy, doctor of theology, and, last but not least, doctor of medicine.

IN *McClure's Magazine* for September is an article on the discovery of ether as an anesthetic, written by the widow of the reputed discoverer, Dr. W. T. G. Morton. It is just such an article as might be expected from the widow, she at seventy relating from memory what occurred fifty years before, and not that of which she was an eyewitness, either, but of which she was told. There is not a line in the whole article to shed a ray of light on the still vexed unsettled question.

DR. I. N. LOVE, to whose retirement from the Marion-Sims Medical College we referred in the last REVIEW, takes the bit in his teeth and runs thusly in the *Mirror:* "Having retired from medical college work, I feel more free now to utter the sentiment that there are about four times as many medical colleges in every section of the country as are needed. A professorship in a medical college should be dependent upon teaching ability, general equipment, and not upon financial ability to buy said professorship. Men are holding professorships to-day in medical colleges who, figuratively speaking, are still in diapers, and who wear their honors and perform their duties about as gracefully as the teething infant handles his rubber ring and his rattle. The late Professor Agnew, of Philadelphia, was an adjunct teacher for thirty years in anatomy before being made professor of surgery, and in him we have a nobler example for the whipper-snappers in swaddling clothes who form a large part of the teaching and controlling faculty in many medical colleges, and spout most vociferously in 'varsity vein' of higher medical education and long terms."

Society Proceedings.

THE Mississippi Valley Medical Association meets at St. Paul, Minnesota, on the 15th, 16th, 17th, and 18th of this month.

THE sixth annual meeting of the American Electro-Therapeutic Association will be held on Tuesday and Wednesday, September 29th and 30th, and Thursday, October 1st, 1896, in Boston, Mass.

THE ninth annual meeting of the American Association of Obstetricians and Gynecologists will be held at the Hotel Jefferson, Richmond, Virginia, Tuesday, Wednesday, and Thursday, September 22d, 23d, and 24th, 1896.

THE York County Medical Society, of Nebraska, meets the first Tuesday of February, May, August, and November. The following are the officers at present: President, B. F. Farley, York; vice president, W. M. Hylton, Gresham; secretary and treasurer, R. McConaughy, York.

THE Central Missouri Medical Society met in Sedalia, August 6th. The following officers were elected for the ensuing year: President, G. W. Holcomb, Clinton; first vice president, F. De Vilbliss, Spring Garden; second vice president, C. W. Heid, Windsor; third vice president, W. C. Overstreet, Sedalia; secretary, A. F. Dresel, Sedalia; treasurer, G. H. Scott, Sedalia.

THE American Academy of Railway Surgeons will hold its next annual meeting at the Auditorium Hotel, Chicago, September 23d, 24th, and 25th, 1896, the first session being opened at 10 A. M. on the 23d. Among the western men who will take part are G. A. Wall, of Topeka; Dr. D. C. Bryant, Omaha ("Penetrating Wounds of the Eyeball"); Dr. W. J. Galbraith, Omaha; Dr. C. K. Cole, Helena, Montana; Dr. G. W. Hogeboom, Topeka; Dr. J. W. Perkins, Kansas City; Dr. L. E. Lemen, Denver. An interesting meeting is anticipated.

TRANSPORTATION ARRANGEMENT FOR THE MEXICAN MEETING OF THE PAN-AMERICAN MEDICAL CONGRESS.—Dr. H. L. E. Johnson, 1400 L street, N. W., Washington, D. C., has been elected chairman of the special committee on transportation. All communications relative to rates, reservation in the special trains, etc., should be addressed to him. A rate of one fare for the round trip has been secured between St. Louis, New Orleans, and other trans-Mississippi points and the City of Mexico. It is confidently expected that this rate will be extended over the entire territory of the United States. Arrangements are in progress for a splendidly equipped train of sleeping and observation cars, with first-class dining car service. Dr. Johnson will presently be in position to announce a rate, which will include railroad fare, sleeping and dining car service both ways and in the City of Mexico, and covering the expenses of various side trips to the most important historic points in the republic.

CHARLES A. L. REED,
Secretary International Executive Committee.

THE Medical Society of the Missouri Valley will meet at Council Bluffs, Iowa, September 17th, 1896, with headquarters at the Grand Hotel, which will also be the place of meeting. The meeting will be called to order at 9:30 A. M. Following is the program:

Organization; registering and payment of dues; report, committee on credentials; reading minutes; miscellaneous business; report, committee on arrangements; report of judicial council.

Digitized by Google

Presentation of Papers.—"Something About Instrumental Labor," Dr. F. Damour, Bolckow, Missouri; "A Case of Anterior Dislocation of the Head of the Radius," Dr. G. W. Boot, Hartley, Iowa; "Operative Technique in Appendicitis," Dr. C. C. Allison, Omaha; "Skin Grafting, a New Method," Dr. J. W. Kime, Des Moines; "A Case of Chronic Pharyngitis Simulating a Tumor," Dr. F. W. Dean, Council Bluffs; a case—title not given, Dr. J. M. Barstow, Council Bluffs; "Treatment of Burns of Conjunctiva," Dr. D. C. Bryant, Omaha; "Breech Presentations," Dr. A. D. Wilkinson, Lincoln; two cases—(1) "Gastrorrhaphy for Dilatation of the Stomach, and Ptosis of the Transverse Colon;" and (2) "A Successful Gastro-Enterotomy with the Murphy Button," Dr. J. E. Summers, Jr., Omaha; "Treatment of Hydro-Thorax and Empyema," Dr. J. M. Emmert, Atlantic, Iowa; "Congenital Dislocation of the Hip," Dr. B. B. Davis, Omaha; a paper—title not given, Dr. R. Hanna, Red Oak, Iowa; "Retrograde Catheterization," Dr. A. F. Jonas, Omaha; "Mental Dynamics and Psycho-Therapeutics," Dr. W. B. Lawrence, Red Oak, Iowa; "An Instructive Case of Labial Cyst," Dr. R. M. Stone, Omaha; "Typhoid Fever," Dr. M. C. Christensen, Council Bluffs; "Remarks on Appendicitis," Dr. F. W. Porterfield, Atlantic, Iowa; "Meningocele," with report of case, Dr. J. P. Lord, Omaha; "Pulmonary Tuberculosis; Etiology," Dr. C. Engel, Aspinwall, Iowa; "A Case of Gunshot Wound of Rectum," Dr. V. L. Treynor, Council Bluffs; adjournment; banquet.

Broncho Bill—Yes, he's got a sore t'roat.
Woolly West—What done it?
Broncho Bill—De rope broke.
—*Chicago Record.*

Phlebitis After Typhoid.—The limb should be elevated and kept at rest. Over the vein apply equal parts of ointments of belladonna, mercury, iodine compound, and vaseline; apply pressure by means of a flannel bandage. As the swelling subsides cautious massage may be applied. Rest is imperative, otherwise there is danger of embolism and consequent paralysis.

A Characteristic Anecdote of Pasteur.—Once when Pasteur was dining with his daughter and her family at her home in Burgundy, he took care to dip in a glass of water the cherries that were served for dessert, and then to wipe them carefully with his napkin before putting them in his mouth. His fastidiousness amused the people at the table, but the scientist rebuked them for their levity and discoursed at length on the dangers of microbes and animalcula. A few moments later, in a fit of abstraction, he suddenly seized the glass in which he had washed the cherries and drank the water, microbes and all, at a single draught.

THE EARLY DIAGNOSIS OF PULMONARY TUBERCULOSIS.

By I. ADLER, M. D.

No one, I believe, entertains any doubt at present that tuberculosis of the lungs is curable, and very frequently is cured—much more frequently, in fact, than is commonly supposed. It is necessary, however, to bear in mind the distinction between tuberculosis and phthisis, on which we have so frequently insisted. As soon as the septic and pyogenic microbes have invaded the tubercular tissue, and the progressive ulcerative destruction of pulmonary substance which we call phthisis has become established, then of course a complete or even a merely relative cure is by no means a very frequent event. Tuberculosis pure and simple, however, that is to say, an irruption of submiliary, miliary, or confluent tubercles into the lung, most frequently in the region of one or both apices, is often completely and permanently cured. This statement is borne out by anatomical observation.

In a large percentage of all autopsies on subjects that have died of disease other than tubercular, we find vestiges of former tubercular lesions. The cicatricial retraction at the apex, with or without old pleuritic adhesions, the hard calcified nodules encapsulated in compact fibrous tissue deeply pigmented, the remnants of cheesy matter which these nodules sometimes still contain leave no doubt either as to the tubercular nature of the changes here displayed, or as to its complete anatomical cure. In a large majority of these cases their history supplies no hint as to any clinical evidence of pulmonary affection in former years. In full accordance with these anatomical data are the results of clinical experience. In a very large percentage of all adults whom we subject to careful examination of the chest we find a dull percussion note, sometimes barely to be appreciated, sometimes more pronounced, over either apex; perhaps a slightly harsh respiratory murmur, a somewhat prolonged and faintly sibilant expiration; often, too, some retraction of the supra-clavicular fossæ. There has been no history of any serious pulmonary affection, but merely the usual statement of more or less frequent "colds;" perhaps not even that. Nevertheless, these physical signs, often barely perceptible, are the evidence of the anatomical condition just sketched, the remnants of old tubercular invasion cicatrized and cured.

Again, the careful practitioner not infrequently has occasion, while treating one of these "colds"—a slight bronchitis with little or no fever, mucous rales all over the chest and muco-purulent expectoration,—to find after a few days, or possibly a week or two, while the rales have disappeared, and the expectoration with them, that a slight hacking cough still persists, and auscultation reveals some fine crackling or submucous

Digitized by Google

rales in one apex. This also gradually disappears, perhaps after change of climate, and the patient is well. But examination a year later will show over the affected apex, retraction, dullness, etc., thus testifying to the fact that the slight "cold" was really a tubercular infiltration, which, however, remained strictly localized, and has now been converted into shrunken cicatricial tissue.

It is well to call to mind here the anatomical and pathological details gone over in preceding lectures. We have seen that the bacillus of tuberculosis exerts primarily a merely local influence. The general symptoms, fever, cachexia, etc., which are the expression of the infection with tubercular toxins, appear only when a certain amount of toxic material is constantly absorbed into the circulation. The amount of toxic material produced depends on the quantity of tubercular infection, and very probably also, to some extent, on the individual disposition of the subject. There may be, therefore, a tubercular irruption of some magnitude without general symptoms. But further than this, it is possible that even the local symptoms may be wanting, or at any rate be extremely faint and dubious. We must not forget that our methods of physical examination, no matter how carefully and searchingly practiced, are after all but very crude when applied to the minute lesions which represent the initial stages of pulmonary tuberculosis. Comparatively very large deposits must have been formed before even the most delicate and highly trained ear can detect a difference in the percussion note or an alteration in the respiratory murmur. Symptoms of bronchial catarrh appear only after the walls of the bronchi have become more or less infiltrated and the circulation in the smaller arteries and veins seriously interfered with by tubercular deposits. In the very earliest stages of the process, therefore, all symptoms on the part of the bronchi may be, and very frequently are, entirely lacking. The so-called initial hemorrhage is certainly not initial in the strict sense of the word, inasmuch as serious infiltration of vascular walls and breaking down of tissue must have taken place before hemorrhage can occur.

As regards the presence of the bacillus in the sputum, we have established in the preceding lectures and demonstrations that the bacillus can appear in the expectorations only when degeneration and breaking down of tubercular masses has taken place and the tubercular material is evacuated into the respiratory passages. We have seen how it may be possible for extensive tubercular infiltration to be present without any traces of bacilli in the sputum. Moreover, clinical experience teaches, as we have just seen, that in these early stages of the disease there may be no sputum because there is no bronchial catarrh. And let me say here by way of parenthesis that the demonstration of the tubercle bacillus in the sputum is the absolutely pathognomonic symptom of tuberculosis. Its presence decides the question beyond possibility of doubt. On the other hand, its absence does not in any way decide against tuberculosis, and it would be a most deplorable mistake to make the diagnosis dependent solely upon the demonstration of the bacillus in the sputum. All clinical, anatomical, and pathological evidence affirms the fact that while the presence of the bacillus is decisive, its absence, even in cases where there is profuse expectoration, does not by itself necessarily exclude tuberculosis. As the result of all these considerations the conviction is forced upon us that pulmonary tuberculosis in its incipient stages may be entirely latent, and in all probability is thus in the overwhelming majority of cases. Furthermore, we are convinced that the earliest appreciable physical signs, be they ever so slight, already represent advanced anatomical lesions.

It seems admitted on all sides that the tubercular patient stands a better chance of recovery the earlier the disease is recognized, the less anatomical damage has been done, and the more intact are the nutritive and recuperative powers of the system. It is true that the therapeutic means at our command are still far from satisfactory. The ardently longed-for specific has as yet not been discovered, notwithstanding the indefatigable endeavors of a large number of the best investigators. Until really specific remedies, such, for instance, as we possess in the antitoxin of diphtheria, are at our disposal in tuberculosis, our therapeutics must necessarily be of an indirect character. It is depressing to acknowledge, but nevertheless true, that our present therapeutics in tuberculosis aims to fulfill merely two general indications: to limit the infection and to invigorate and build up the nutrition and the resisting power of the system. It is not our business at present to deal with the therapeutical side of the question, but we adduce these facts to emphasize the importance of the earliest possible diagnosis in pulmonary tuberculosis. The question thus arises, When are we justified in making this diagnosis?

It is self-understood that there can be no doubt concerning advanced cases of tuberculosis or incipient phthisis where a majority, or even all of the classical symptoms, including bacilli in the sputum, are in evidence, although even in such cases mistakes are too often made by preoccupied or careless practitioners. But in these very earliest stages, with but very slight and possibly dubious symptoms, how are we to act? Are we to wait for bacilli in the sputum, for hemorrhage, or night-sweats, before we recognize the enemy and call aloud its name? Most assuredly not. Invaluable time is too often thus frittered away. It is sad enough that the endeavors of the physi-

Digitized by Google

cian are constantly balked by the negligence, ignorance, and often, too, the cowardice of the patient. The careful and conscientious practitioner should always be on the alert. It is necessary to reiterate to ourselves again and again that the first and slightest physical signs presuppose already advanced anatomical lesions. The apices of the lungs, therefore, as the most frequent starting point of the disease, should always claim special and close attention. Fine rales, even if there is no dullness on percussion, and though confined to an area ever so small, should be looked upon with the greatest suspicion. The absence of fever, of cough, of all subjective symptoms, should not delude us into a baneful security. Naturally, in those cases where there is hereditary taint, where there is a history of pleurisy or of tubercular glands, etc., our suspicions will be more easily aroused and slight symptoms considered more gravely. In every case, however, in which catarrhal symptoms, no matter how slight, are localized strictly at the apex, we are bound at once to consider the question of tuberculosis.

It is necessary, of course, to distinguish between these active and incipient conditions and those cicatrical remnants of former apical disease mentioned above. Nor would we have the physician on first recognizing a few faint rales at the apex in a person otherwise healthy, at once alarm the patient and his family by the cry of tuberculosis. While the first examination should awaken grave suspicions in our own mind, we are bound to watch and wait. But not too long. If after a few weeks and after reasonable treatment these symptoms, insignificant as they seem, show no tendency to disappear, perhaps, on the contrary, rather a tendency to spread, we should hesitate no longer, and undeterred by the absence of fever, cough, expectoration, bacilli, etc., boldly inform our patient and his friends of the probably tubercular nature of the lesion, and at once resort to the most radical measures at our command. It is possible that with all care and attention on our part, at rare intervals a case may occur in which our fears and suspicions have led us to attribute undue importance to insignificant symptoms. The more closely we examine, the more carefully we individualize, the more earnestly we study our cases, the rarer will be such occurrences. And after all, it is better to take the risk of occasionally perhaps impressing a patient with an exaggerated notion of the gravity of his case, than to allow many to lose invaluable time and the possible chance of recovery.—*New York Polyclinic.*

WHITE radiating cicatricial lines about the lips and the peg-like or Hutchinsonian teeth are pathognomonic of congenital syphilis.

THE WESTERN MEDICAL REVIEW would like to have your support, in the form of a subscription and an occasional paper.

HOW TO REMOVE PUS TUBES WITHOUT RUPTURE.*

BY I. S. STONE, M. D.,
WASHINGTON, D. C.

The contents of pus tubes may not be infectious, but it is desirable to avoid the usual soiling of peritoneal and wound surfaces with any kind of pus. It is, therefore, in the opinion of the writer, better to make a longer incision, to tie the ovarian and ovaro-uterine arteries and free the specimen at one or both ends or sides before attempting enucleation.

The method about to be described can be used in any case; the simple ones are always easy work, but it is in the difficult cases, where there are many adhesions and a large quantity of pus present, that the writer has found the greatest satisfaction in adopting the following plan:

METHOD.

Clamps are placed upon one of the tubes, closely hugging the uterus. The clamp may embrace about one inch of the broad ligament in its bite. The ovarian artery is either tied or clamped as near the pelvic wall as possible. A ligature may be placed on each severed end or placed before section if preferred, the incision to be made between these points. No bleeding of importance can occur after this, while the surgeon can leisurely enucleate the tube or ovary with contents safely, and with infinitely greater ease than after the ordinary fashion. In many instances the appendages cannot be as readily rolled out from behind as from the front, and the separation from the broad ligament is often easier than from the bowel if strongly adherent. But the most important assistance given the operator by this method is the great amount of space afforded. There is plenty of room to work, as the tube comes right up when separated from the uterus. Quite naturally, many pus sacs rupture easily, and this method will not prevent soiling the peritoneum in every instance, but that it will do so in most instances I know from frequent observation. Finally, a very serious defect in the technique of many operations is found in the large and infectious stump of the tube left after removal of the adnexa. Here an exsection of the cornua is demanded and is provided for in the beginning of the operation. The ovaro-uterine artery is ligated, the forceps removed and another deeper ligature used if much bleeding occurs. Then the exsection and suturing of the cornua is rapidly and easily done. The same technique is used on the remaining side and needs no further demonstration. The operation is easier in the Trendelenburg posture, with a good light. I have used no flushing or drainage in any case of this kind for the past five months, and have had no sepsis in the wound or rise of temperature, or peri-

* Read in the Section on Obstetrics and Diseases of Women, at the Forty-seventh Annual Meeting of the American Medical Association, held at Atlanta Ga., May 5-8, 1896.

Digitized by Google

tonitis or other trouble consequent upon this technique. In some cases rupture will occur in spite of the greatest care, but if a sponge is properly placed all the pus can be caught and flushing and drainage avoided.

SUMMARY.

This method gives more space for careful enucleation. The larger blood supply is tied off at once. Smaller silk or catgut can be used, as no *en masse* ligatures are used. The ligatures and sutures are not infected. No sinus will be formed. There can be no possible danger of hemorrhage after operation. No ligatures can slip. If rupture is avoided there is no need of flushing or drainage save in very rare instances, when time cannot be given to careful suturing, which must be the rare exception. It facilitates enucleation by affording another point of cleavage, namely, from the anterior surface of the pus sac. Finally, it facilitates exsection of the uterine cornua.

The sketch gives a good idea of the steps of the operation and the appearance of the uterus and broad ligament after operation. The uterus can be removed in addition to the adnexa if the surgeon so desires. The specimen here exhibited was removed on the 20th ultimo. It is very large and came from the left side. The right tube was small and a small amount of pus escaped before I knew I had a pyosalpinx to deal with. The patient recovered without trouble of any kind.—*Journal of the American Medical Association*, July 25.

PRECEDENT CAUSES OF TUBERCULOSIS.*

By J. WELLINGTON BYERS, M. D.,

CHARLOTTE, N. C.

I invite your attention to some views in regard to the condition that has been designated as the precedent or pretubercular stage of consumption. That there is such a condition capable of distinct clinical position and recognition is very generally conceded, though as to the exact nature of its underlying phenomena there remains much yet to be determined. We are not, however, without some useful and guiding data, and such as we do possess has not received the consideration that the condition would appear to warrant.

We have reached a position where we can appreciate the discoveries and bearing of the work of Koch, and we realize the fact that these have not furnished the therapeutic resources that their first announcement seemed to promise. Influenced by this fact, investigation has been compelled to turn to other paths of work. The history of the pathology of tuberculosis has been varied. Our earliest conception of the disease was that it was pus, a process of suppuration; second, that it was inflammatory nodules; third, that these were distinct tubercles; fourth, that these tubercles contained a virus; fifth, that this virus was inoculable; sixth, that inoculability was due to a specific bacillus. When this sixth and last stage of our knowledge was reached a strong hope possessed us that means for the prevention and cure of tuberculosis would soon be forthcoming. So far this has been a series of disappointments, and we do not possess a single remedy capable of effecting anything like a cure of this disease. Baffled by repeated efforts to treat tuberculosis from its bacteriologic standpoint, research has turned to an investigation of its precedent causes, and is making an effort to detect and control those contributing factors, as the only possible means of modifying this disorder. Clinical experience has long taught that pulmonary tuberculois, to be successfully combated, must be taken in its very earliest stage, and that the ratio of arrests, or cures, is invariably in proportion to the recency of the disease. The reason for this is now plain. The older theories of Virchow, which showed that the disposition to tuberculosis was the same as the disposition to inflammation, and that the primary foci constituting the anatomical basis for the implantation of the bacilli and the production of tuberculosis was a previous inflammation, and now admitted as the correct ones. It has been established that tubercular changes are always secondary to inflammation, and that infection of the human organism does not occur in the absence of the latter. These precedent causes, consisting of changes in the integrity of the tissues and cells, are local and general, acquired and hereditary. Before the bacilli can enter and flourish there must exist certain favorable conditions in the soil. The fact that it is not always possible to point out the precise location or seat of these vulnerable foci in no way invalidates the correctness of this statement; they must always be present. Experiment, experience, and analogy all demonstrate that tuberculosis is never primary, but secondary, in time and pathologic importance. In the normal condition of the tissues no foci exist, and the bacilli entering through the respiratory channels are removed with the expectoration or destroyed by the phagocytes. The system is in this way kept immune. If, however, the pulmonary tissue contains lesions, or foci, the effect of previous inflammatory disease, such as tracheitis, bronchitis, or broncho-pneumonia, or foci such as are produced by foreign bodies incident to the occupations of stonecutters, cutlery works and the like, they constitute vulnerable points for the implantation of the bacilli, and are liable to invite tuberculosis. It is almost certain that the presence or absence of these points in the lungs constitute the real basis for the difference of susceptibility manifested at different periods. Croupous pneumonia is rarely followed by tuberculosis, though furnishing the gravest changes in the lungs. The reason for this is that the exudation in the alveoli consists largely

* Read in the Section on Practice of Medicine, at the Forty-seventh Annual Meeting of the American Medical Association, held at Atlanta, Ga., May 5-8, 1896.

Digitized by Google

of fibrin and leucocytes, which quickly break down and is soon reabsorbed, and the bacilli find no foci to infect. In bronchitis and catarrhal pneumonia the absorption is much slower, the products of inflammation last longer, and the bacilli have the favorable conditions present for a longer time, and hence we find tuberculosis a frequent result. It is reasonable to conclude that these products of inflammation must constitute the controlling factors and operate in the manner stated. Niemeyer taught that tubercular changes were always originated in previous inflammatory conditions, and while he did not clearly interpret the meaning of them, he chronicled the fact which we are now able to understand. His views were abandoned only for a time, and we are again realizing their importance and truth. So far, tubercular processes are seen to be the result of inflammatory changes. There are, however, cases of tuberculosis in which no such factors form a part of their clinical history. The disease appears in the absence of bronchitis, broncho-pneumonia, whooping cough, measles, and other diseases involving the air passages, and also results from fevers, anemia, gastric and other diseases. How can the theory of primary inflammatory foci in the pulmonary tissues be made to fit these cases? In my opinion we must assume that the organism under certain conditions of nutrition, such as follow the diseases enumerated, manufactures or produces defective blood cells or leucocytes. These leucocytes, following the general law of physiology, are either encysted or destroyed by the organism. When from any cause the blood-forming organs produce defective cells, they are treated like other extraneous or foreign substances and destroyed, encapsulated, or extruded. In the diseases mentioned this is, in all probability, the case; the imperfect leucocytes are extruded into the tissues and at different localities, such as the lungs, form nodules of dying or dead cells. These nodules set up a low grade of inflammatory reaction, which may continue until infected by the bacilli or cast off by expectoration or destroyed by the phagocytes. Under these conditions the foci are present and constitute the same kind of pathologic seats as those following inflammatory diseases. That this is a correct view of the infecting process in tuberculosis can be experimentally shown by the introduction of such substances into the tissues as bits of sponge, cork, or cloth and allowing them to remain for a time. After a while they are seen to induce inflammatory reaction of a very low grade, and later on become tubercular. The natural history of the bacilli shows that they never possess the power of unconditionally attacking the organism; that they are peculiar in their methods of invasion and invariably demand precedent conditions, causes or susceptibility in order to attack. Seeing the nature of these conditions, their place in the pathologic condition involved, and their connection with the etiology of this disease, the question may be asked here, can they be controlled? In the beginning, when the foci are few and small, we may hope to accomplish much by proper treatment. Loss of weight and capricious appetite are the first indications of altered nutrition. We should endeavor to meet these with proper food, exercise in the open air, and other well recognized means. The possibilities of cure in this stage are numerous, since the organism has not the toxic phenomena as a result of the pus cocci to contend with, which appears later on. We should direct our efforts towards removing the inflammatory nodules through tissue nutrition, thereby stimulating the processes of phagocytosis, absorption, or fibrosis in the affected regions. In case we do not get the desired results, the administration of an arsenic preparation to promote fatty metamorphosis and the hypophosphites to remove them might offer some advantage. The patient undergoing this treatment should be placed, as far as possible, in aseptic surroundings, such as mountains, in rural localities, where the chances of bacillary infection are reduced to a minimum. The important point is to prevent the simple inflammatory process from becoming complicated by specific infection, when it rapidly passes beyond ordinary measures of control. In subjects presenting evidence of hereditary influences we know that the bacilli are likely to thrive and we must not wait, but treat long before hemoptysis, pain in the side, wasting signs of active symptoms have appeared. We are too much inclined to give conservative advice in these cases, and find later on that we should have been active in the work of prevention.

In this paper I have attempted to point out that the control of tuberculosis lies largely in its early and preventive stages. That its precedent causes, in inflammatory foci, are the result of previous disease. That the early recognition and treatment of this condition would remove the chief cause of tuberculosis.—*Journal A. M. A.*

Miscellaneous.

Hay Fever.—Discard the use of sprays and apply to the nostrils, on a cotton pledget, an unguent composed of six parts cocaine muriate, ten of carbolic acid, twenty of menthol, 120 of oil of sweet almonds, 240 of zinc ointment.—*American Medical Journal.*

Why the Quack Prospers.—The fact is that the United States of America are not yet sufficiently civilized for the daily newspaper to have a real appreciation of what the profession of medicine does know and does not know. In other words, the average reporter, and possibly the average editor, still believes in clairvoyants, the seventh son of the seventh son, the bone setter, and the healer who neglects the barber and cultivates the sublime art of curing disease which does not exist.—*The Post-Graduate.*

Digitized by Google

CHLORAL CARMINE.—The following makes a beautiful and permanent carmine, useful in almost every kind of work, and especially so in animal histology:

Carmine, No. 40	50 cgm.
Alcohol	20 ccm.
Acid hydrochloric	2 ccm.
Chloral hydrate	25 gm.

Mix and dissolve.—*National Druggist.*

JOIN A MEDICAL SOCIETY.—Every medical man should be a member of a medical society. He will never know how great a man he is till some one praises him in a discussion, nor how small a man till some pompous fellow member takes him to task; but all these frictions serve but to round and smooth a busy life, and no one can do without it who desires to be a physician in the highest acceptancy, and not a man who doctors.—*Atlantic Medical Weekly.*

CANCER OF THE UTERUS.—1. Cancer of the cervix uteri, if left without surgical interference, always kills.

2. The disease is, in most instances, primarily a local process.

3. Early hysterectomy will cure quite a percentage of cases.

4. The microscope, while a great diagnostic assistant, is not infallible in its findings.

5. The experienced surgeon is warranted in resorting to a hysterectomy, even in the doubtful cases.

6. All malignant pregnant uteri should be removed when seen, before the disease has advanced beyond the period of a probable cure.—Cordier, *International Journal of Surgery.*

THERE is seldom any use in treating a fractured hip in an old and feeble person. It is the patient, and not his disease, which requires careful watching and nursing. Get him out of bed as soon as the local shock, with the accompanying swelling and pain, subsides, and do not invite pneumonia, bedsores, and a host of complications by confinement in one position. Above all, if any fixation apparatus be used, let it be as light and portable as possible, remembering that in the vast majority of cases good results will be as likely to follow treatment without splint or other appliance. Fractures of the arm and forearm are often kept too long in splints, and the resulting atrophy from disuse may in the end be far more serious to the patient than a moderate degree of deformity with a sturdy and useful member. A dislocation should be reduced as soon as possible, while a fracture may often be allowed to wait for a convenient time and place, the emergency dressing simply guarding against such accidents as perforation of the skin by subcutaneous fragments of bone, dangerous pressure upon important structures, or threatened laceration of nerves or vessels.—*International Journal of Surgery.*

PARALYSIS OF THE SIXTH AND SEVENTH NERVES OCCURRING WITH WHOOPING COUGH.—In the *British Medical Journal* (June 13, 1896), Craig, of Londonderry, reports the case of a little girl, aged 3 years, suffering from whooping cough of ordinary severity, complicated by complete paralysis of the sixth and partial paralysis of the seventh nerves. Patient was first seen two months after the commencement of the whooping cough, and five weeks after paralysis was first noticed. On one occasion during a paroxysm of coughing blood had been forced from the left nostril. Facial paralysis was quite marked. The left angle of the mouth was depressed. There was inability to close firmly the left side of the mouth. Saliva was not retained, but dribbled from the corner of the mouth. Internal strabismus very marked in the left eye, showing complete paralysis of the sixth nerve. Apart from the squint and the incomplete facial paralysis, there was no loss of power. Arm and leg on same side were quite normal. The remaining ocular muscles were not affected. Pupils were equal. The case was seen first on November 11, 1895, and on June 1, 1896, the child was in perfect health, but the paralysis was unimproved. The author places the lesion below the nuclei of the sixth and seventh nerves, not affecting fully the fibers for the orbicularis palpebrarum and frontales, and in the case of the sixth situated so as not to affect the fibers which subserve the inward movements of the sound eye. There was no affection of the auditory and no sign of injury of the facial in the Fallopian canal.

CANNABIS INDICA.—Mackenzie (*La Sem. Med.*) speaks of cannabis indica in all forms of cephalalgia. He has found it acts favorably even in the severe headaches attending cerebral growth. In chronic uremia, where opium is contra-indicated, it is especially serviceable. He has found the remedy to be almost a specific for that continuous form of headache which begins in the morning and lasts all day. In these cases the pain is generally dull and diffuse, but marked by occasional exacerbations. While it is rarely severe enough to interfere with occupation, yet it constitutes a source of constant annoyance to the patient. In such cases the author administers, morning and evening, from one-twelfth to one-half grain of the extract in pills. If these doses are not sufficient he gives one grain in the evening and one-half grain in the morning. In very obstinate cases the dose is still further increased, the larger dose always being taken in the evening, until relief is afforded or toxic symptoms become manifest. In some instances Mackenzie combines gentian, cinchona, or hydrobromate of caffeine with the cannabis indica. In various neuralgic affections, gastralgia, the pains of tabes, the drug often proves very useful. In skin diseases associated with intense itching, particularly senile pruritus, where local applications fail to relieve, cannabis

Digitized by Google

indica is often used with great benefit. The author has rarely observed any untoward effects from its use; nevertheless, to avoid toxic manifestations, the drug should be given at first in small doses, the latter being gradually increased.—*St. Louis Medical and Surgical Journal.*

Cleanse the Alimentary Canal.—With the advent of hot weather the occurrence of diarrheal affections, both in adults and children, is becoming frequent. Not only in domestic practice, but by some physicians, the mistake is made of attempting at once to check the intestinal flux by means of opium and astringents. The result of this, if successful, is to imprison within the bowel toxic and irritating materials that keep up the disorder, and if unsuccessful in checking the flow, the patient is more or less depressed by the narcotic drug, in addition to the intoxication resulting from absorption of intestinal poisons. No matter whether the case be seen late or early, the first indication is to clear the alimentary tract. For this purpose a high enema may be used, calomel given in small doses, or, as we prefer, castor oil and aromatic syrup of rhubarb may be given together in equal parts, namely, about a teaspoonful of each for a child, a tablespoonful for an adult. After this has secured the removal of the offending materials from the bowel, intestinal disinfection, by means of salol, salophen, benzoyl guaiacol or guaiacol carbonate, benzo-naphthol, creosote, or whatever other drug the physician prefers for this purpose, is in order. The diet must be restricted to small quantities of non-fermentable food, preferably liquid. Pancreatized, sterile milk usually answers the purpose for adults. With children, on the other hand, it is well to avoid milk, and beef-juice freshly prepared at home by expression from a piece of warm meat, or preferably, in some cases, barley-water, is to be substituted during two or three days. When the pain is severe and there is a tendency to continuance of a watery discharge from the bowel after all irritating matters have been removed (and to make sure of this a high enema should be given), Dover's powder or other appropriate preparation of opium may be employed with due caution, both in the case of children and in the case of adults. In cases in which pain and tenderness are localized in the region of the cecum, appendicitis is nowadays often improperly diagnosticated. It is true that in very many cases the cecum and appendix share in a general catarrhal process. In such cases it is well to place an ice-bag over the cecal region until the pain and tenderness subside. An important diagnostic point is the presence or absence of rigidity of the abdominal muscles upon the right side. In the absence of rigidity or "on guard" condition, as it is now termed, acute appendicitis should never be diagnosticated unless a collection of pus is palpably to be demonstrated.—*Philadelphia Polyclinic.*

Thiersch's Method of Skin Grafting.—Dr. J. C. Oliver read a paper on the above subject before the American Medical Association at Atlanta, from which we make the following abstract:

The technique of the method is comparatively simple. An absolute essential is the careful preparation of the patient for the operation. The area to be grafted and the region from which grafts are to be secured (usually the skin of the thigh) must be thoroughly sterilized previous to the day of operation. When the grafting is to be done on old surfaces, which have been bathed in pus for a greater or less time, it seems advisable to begin the sterilization of the ulcer several days before the time of grafting. For this purpose dressings saturated with carbolic or bichloride lotion should be kept constantly in contact with the part. After the parts have been properly prepared for operation, a sharp spoon is used for the purpose of scraping away the granulations which cover the ulcer. This layer of granulations is often surprisingly thick, but the sharp spoon should scrape all away until the firm base of the ulcer is reached. The edges of the ulcer, which are usually thick and indurated, should also be thoroughly curetted, and a raw, bleeding surface left. After this has been done the oozing from the surface may be very satisfactorily stopped by elevation of the limb and pressure from hot sponges. The Esmarch tourniquet has been recommended to control the oozing from the scraped surface, but experience has demonstrated the fact that the oozing which occurs after the tourniquet is removed and takes place under the grafts, thus lifting them off their bed of tissue, does harm, especially when dealing with an old suppurating surface. The blood clot then seems to form an excellent culture medium for the pyogenic organisms, and suppuration occurs early after the grafting, thus seriously endangering the success of the operation. In those cases in which an aseptic field is to be grafted the objection to the use of the tourniquet would not be so serious a one. Nevertheless its use is unnecessary, for the reason that pressure and elevation of the parts is sufficient to bring about an early cessation of oozing.

After obtaining a dry surface upon which to implant the grafts, the next step is cut the ribbons of skin. This is best done by means of a very sharp razor, which has been ground flat on its under surface. The hands of an assistant are used on each side of the thigh in such a manner as to render the skin tense; then, with a sawing motion, backward and forward, of the razor the upper layers of the skin are removed for a distance of an inch or two. The incision of the skin does not pass into the deeper layers; all that is necessary is to enter the papillary layer of the integument. As the graft is cut by the razor it will ordinarily fold up upon that instrument, and may be

Digitized by Google

conveniently transferred upon it. The layer of skin is now spread out upon the surface to be grafted. This can be much facilitated by the use of a couple of probes, wet either in sterilized water or with the physiologic salt solution. Care should be taken to spread the graft out evenly upon the raw surface. In like manner other grafts are cut and applied. The edges of the graft should overlap each other and also the margin of the surface. When covered completely with these strips of skin, the dressing should be applied so as to retain them in position. Various methods of dressing such surfaces have been recommended. Thiersch himself recommended that they be covered with rubber tissue. Later work in this line seems to demonstrate the fact that the nature of the dressings is not so important as was at first supposed. Most operators, following the lead of Thiersch, still adhere to wet dressings for several days at least, after the grafting has been done. Other observers have reported excellent results from the use of dry dressings. It seems probable, therefore, that wet or dry dressings may be used, at the option of the operator. It may even be predicted that here, as elsewhere in surgery, dry dressings will supersede wet.

One word as to the treatment of the areas from which the grafts are taken. Patients frequently complain most bitterly of pain and annoyance produced by these raw surfaces. The ordinary dressings are not well adapted for this purpose, because of the irritation produced by the adhesion of the gauze to the raw, sensitive surface. The redressing is unpleasant and painful, and likely to cause suppuration. The use of gauze saturated with sterilized oil, containing one per cent of carbolic acid, has been found to be satisfactory both to the physician and the patient. Healing goes on rapidly and is painless. Ordinarily there will be no necessity for changing such a dressing until the surface is healed.

Proceedings of the Nebraska State Board of Health.

MEMBERS—Dr. J. V. Beghtol, Friend, President; Dr. C. F. Stewart, Auburn, Vice-Pres.; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.
Board meets first Thursday of each month at the state capitol, Lincoln.

THE Nebraska State Board of Health, at its meeting held September 3d, granted certificates to the following:

Henry E. Johnson (H.), Lincoln,
Chicago Homeopathic Medical College, 1893.
John M. Neely, Jr. (R.), Alvo,
Kentucky School of Medicine, Louisville, Ky., 1896.
Frank F. Dennis (H.), North Platte,
Chicago Homeopathic Medical College, 1894.
Lee Wallace Rork (R.), Reynolds,
Medical Department, University of Maryland, 1896.

One application was held over; none rejected.

Necrology.

DR. JAMES NORTHRUP, of Woodstock, Ill., died there August 8th, aged 71.

DR. ANDREW J. PIERCE died in Kansas City, Missouri, August 13th, aged 64.

DR. WILLIAM SHRADER died at his home in Columbia, Missouri, August 13th.

DR. THOMAS KILLOUGH, of Hanover, Illinois, died there August 25th, aged 57.

DR. JACOB ROSENTHAL, of Chicago, died August 24th, aged 34. His death was the result of appendicitis, for which he was operated upon. He was a man of promise, well educated, and loved by all who knew him.

DR. C. T. BEEBE, Shelton, Nebraska, died September 3d, his death resulting from accidental shooting while hunting. Dr. Beebe was twenty-three years of age. He graduated from Creighton Medical College, Omaha, last spring.

DR. ELSWORTH F. SMITH, of St. Louis, for many years a member of the faculty of the St. Louis Medical College, died at Ft. Missoula, a western army post, August 19th, aged 73. The doctor was, at the time of his death, visiting his son-in-law, Dr. Crosby, an army surgeon, and while there was accidentally so badly burned on the night of the 17th that death resulted in thirty-six hours.

DR. HARRY HODGEN, son of the distinguished late Dr. John T. Hodgen, died at Alma, Michigan, August 28th, aged 41. He was at the Alma sanitarium, taking treatment for general breaking down of the nervous system, complicated with kidney trouble. He was thought to be rapidly improving, but a sudden change in his condition resulted in his unexpected death. He held the chair of orthopedic surgery at the St. Louis Medical College.

Books and Pamphlets Received.

The Use of Eucaine Hydrochlorate in the Nose and Throat. By Hal. Foster, M. D. Reprint from *Langsdale's Lancet.*

Some Noteworthy Hysterectomies—A Retrospective Review. By H. G. Wetherill, M. D., Denver, Colorado. Reprint from the *American Gynæcological and Obstetrical Journal.*

Ectopic Pregnancy—A Case of Extra-Peritoneal Ectopic Gestation—Operation in the Twelfth Month—Recovery. By H. G. Wetherill, M. D., Denver, Colorado. Reprint from the *Colorado Medical Journal.*

Medical and Surgical Register of the United States. Fourth edition. R. L. Polk & Co., publishers.

If this work is no more reliable for other states than it is for Nebraska, then all we can say is that it is a huge book, but thoroughly unreliable.

Digitized by Google

Therapeutic Notes.

Treatment of Chancroid.—Audry recommends the following treatment for chancroid: Wash, cleanse, and dry the ulcer, and then hold a red-hot Paquelin's cautery close to it for an instant. One treatment converts the sore into a simple one which will heal quickly under iodoform.

Epididymitis.—The testicle should be wrapped in lint and moistened frequently with lead water and opium, or the following:

℞ Tincture of aconite,
Tincture of opium, ... aa f ʒ j.
Dilute lead water,
Water, ... aa f ʒ ij.

Intestinal Fermentation with Constipation.—

℞ Ext. aloes . . . . . gr. vj.
Pulv. rhei . . . . . gr. vj.
Benzosol . . . . . gr. ix.
Ext. hyoscyami . . . . gr. vj.

Misce et ft. caps. No. xii. Sig.—One after meals.—Thomas Hunt Stuckey, M. D., in *American Therapist*, August.

For Vaginitis.—

℞ Pulv. alum,
Zinci sulphatis,
Sodii biboratis,
Acidi carbolici, ... aa ʒ j.
Aq. . . . . ℥ vj.

M. Sig.—A tablespoonful to a quart of lukewarm water as a vaginal injection twice daily.—*Vanderbilt Clinic.*

Male Fern in the Treatment of Tapeworm.—In the *Revue Internationale de Medecine et de Chirurgie* for August 10th Dr. W. Morain attributes the following formula to Créquy:

℞ Ethereal extract of male fern . . ʒ ij.
Calomel . . . . . gr. xij.

M. Make 16 capsules. Sig.—One to be taken every five minutes, fasting, until all have been swallowed. It is well, remarks Morain, to take about an ounce of castor oil in an hour after taking the last capsule. The patient should defecate into a vessel filled with water, in order to guard against the worm's breaking.

In the case of a child the capsules cannot be used, but the following preparation, attributed to Duchesne, may be employed:

℞ Ethereal oil of male fern . . ʒ j.
Calomel . . . . . gr. vj.
Water,
Powdered sugar, . . . aa ʒ ss.
Gelatin . . . . . q. s.

M. Sig.—To be taken in two or three doses.—*New York Medical Journal.*

Dr. George V. Swinburne recommends the use of a ten per cent solution of argon in gonorrhea. The irritation is quickly allayed and the discharge rapidly diminishes.

Chronic Rhino-Pharyngitis.—

℞ Menthol . . . . . part 1.
Oil of sweet almonds, or
Liquid vaseline . . . parts 10.

M. Sig.—Apply locally with a brush.—*Fougeray.*

An excellent nerve tonic and sedative in neurasthenia:

℞ Asafœtidæ . . . . . ʒ j.
Acidi arseniosi,
Strychniæ sulph., . . . aa gr. ss.
Ext. sumbul. . . . . gr. xxx.
Ferri subcarb. . . . . gr. xl.
Quininæ valerianat. . . . gr. xxiv.
Fiat caps., No. xxiv.

M. Sig.—One after each meal.

Rectal Alimentation.—The following prescriptions are given by the *Journal des Practiciens* of March 14th, 1896:

As a nutritive enema:

℞ Cod liver oil . . . . . ʒ v.
Yolk of one egg.
Lime water . . . . . ℥ x.

This mixture is sufficient for four or five enemata, which may be given during the course of a day. In other instances the following may be employed:

℞ Cod liver oil . . . . . ʒ v.
Yolk of one egg.
Chloride of sodium . . . gr. xl.
Water . . . . . ℥ x.

This is also sufficient for four or five separate enemata.

In still other cases, where it is desirable to use the hypophosphites, and the stomach will not retain them, the following rectal injection may be employed:

℞ Cod liver oil . . . . . pt. j.
Gum tragacanth . . . . gr. xxxv.
Gum arabic . . . . . ʒ iss.
Hypophos. of lime . . . gr. xxxv.
Lime water, a sufficient quantity to make . . . . . qt. j.

From four to six ounces of this liquid may be used as an injection.

For dysentery:

℞ Sulphate of quinine . . . . gr. x.
Powdered ipecac root . . gr. v.
Chloride of ammonium . . gr. x.
Tincture of opium . . . gr. xij.
Distilled water . . . . . ʒ j.

Of this a small teaspoonful may be taken every four hours.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL I. No. 6. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. OCTOBER 15, 1896.

Original Articles.

BREECH PRESENTATIONS.*

BY A. D. WILKINSON, M. D.,
LINCOLN, NEB.

There is one common law regulating the whole of nature's operations. M. Virey (*Revue Medicale*, vol. II) states that in those pregnant animals of the multiparient kind which he has dissected he always found in the horns of the uterus the snouts pointing to the vulva; that in a gravid viper which he opened all the young, eight in number, were placed in the direction with their mouths towards the external part; that in the egg the head is always directed towards the large end, and that that end is extruded first; and that the same obtains with regard to the ova of fishes. We all know that the larvæ of insects escape with the head first, and that the caterpillar eats through its silky covering, and we believe the normal human fetus, in a normal uterus, at the conclusion of a normal gestation,—that is, no accident happening to either mother or child,—would invariably present at labor by its vertex.

Mauriceau, writing in 1668, described natural labor, to-wit: That it be at full time; that it be speedy, without any ill accident; that the child be alive and that it comes right; and unnatural labor when the presentation is either the pelvic or with the side or across position, which are quite contrary to nature.

Dionis says labors are unnatural when any other part of the child presents but the head, and a foot presentation is the least dangerous of any of them.

Denman says labor shall be called natural if the head of the child present and labor is completed within twenty-four hours and no artificial assistance required; if any other part present, it is preternatural.

Baudelocque considers every labor as natural in which the woman might be delivered without help, and makes such consist of four principal presentations: First, the head; second, the feet; third, the knees; fourth, the breech.

Dewees follows Baudelocque.

Velpeau contends that whilst breech presentations most generally terminate alone, as has been noticed by practitioners of all ages, yet it does not warrant him in saying, with the moderns, that these presentations are natural. He says: "Without pretending, with the ancients, that delivery by the feet is always dangerous, or that we should endeavor to bring the head to the strait in preference to letting the fetus escape feet foremost; without referring, with Avicenna, to the examples of Agrippa and Nero, or that of Richard of England, etc., to prove that children born in this way necessarily become tyrants, criminals, or wretches, who are a disgrace to human nature, I think that we shall be at least forced to admit, with Celsus, Moschion, Pare, and De St. Germain, that this kind of labor is less favorable than that where the other extremity of the occipito-coccygeal diameter presents. It would certainly be both a very erroneous and a dangerous doctrine to say, with Rhodion, Dionis, A. Petit, and Bounder, that delivery by the feet is easier than by the head."

Blundell, Simpson, Lee, Longshore, Moreau, Charpentier, Meadow, Rigby, Ramsbotham, Playfair, Lusk, and a host of others, class any other presentation but that of the head a preternatural presentation.

Getting down to more modern times, Dr. Penrose, of Philadelphia, in the *American System of Obstetrics*, states in his article, "Mechanism of Labor," that there are but two presentations possible in natural labor—presentation of the head and presentation of the pelvic extremity of the child; but, strictly speaking, the vertex presentation is the only absolute natural presentation. Whether this view is thoroughly correct or not, it should be decided by the relative frequency of the different presentations. Statistics show that head presentations occur in about 97 per cent of all cases; face presentations, 1 in 250 cases; and breech presentations, as often as 1 in 40 or 50 cases at full term, or 1 in 30 when miscarriages and premature births are included. To be more exact, will submit the following:

Mme. Lachapelle, 1,390 among 37,895 labors.
Dubois, 85 among 2,022 labors.
Hecker, 99 among 8,472 labors.
Depaul, 633 among 16,233 labors.
Pinard, 3,301 among 100,000 labors.
Mme. Boivin, 611 among 20,157 labors.
Collins, 409 among 16,654 labors.
Ramsbotham, 1,220 among 48,996 labors.
Simpson, 44 among 1,421 labors.
M. Naegele, 76 among 1,411 labors.
Henne, 6 among 555 labors.

* Read before the Medical Society for the Missouri Valley, at Council Bluffs, Ia., September 17, 1896.

Digitized by Google

Beatty, 28 among 1,182 labors.
Dr. Joseph Clark, 61 among 10,387 labors.
Moschner & Kersack, 125 among 12,329 labors.
Averaging in French practice, 1 in 42½.
Averaging in English practice, 1 in 70.
Averaging in German practice, 1 in 53.
Averaging in American practice, 1 in 40 to 50.

Thus showing by its frequency that we, as practitioners, should make the management of such an object of much interest, inasmuch as it involves the welfare of the mother and child, especially the latter. It is not an easy matter to determine why the breech occurs once in every forty or fifty cases, and it is far less easy to say what is the reason that certain women are prone to this sort of labor as to bring all their children in this manner.

Professor Meigs reports one woman whose children, four in number, were all born with breech presentations. Dr. Collins, of Dublin, reports one who gave birth to nine children, all preternatural; and Dr. Nourse, in the *Ohio Medical Record*, reports a woman, the mother of twelve children, all born with breech presentations. Now if the usual cause given for breech presentation is purely accidental, how does it explain the peculiar phenomena in these cases reported, or were these particular children without the "certain instinct" Prof. Paul Dubois talks about, which he claims happens about the seventh month of pregnancy?

Violent exercise, the shaking of a carriage, different postures of the body, or the lady of luxury, who reclines on a sofa during the whole of gestation, are equally liable to have their children present preternaturally. Irregular presentations are popularly believed to be more frequent among the lower than the higher classes. Ramsbotham says this is not correct, but it seems to me that this anomaly is due to laxity of the uterus and abdominal walls, permitting lateral obliquity; or an excessive amount of liquor amnii, permitting free revolution, and to multiple pregnancy, for it is the rule that one out of every four in a twin pregnancy is a breech—a case reported in a recent number of the *American Medico-Surgical Bulletin* of a quintet labor, of which four of them presented by the breech. Hydrocephalus and a deformed pelvis are also causes. This latter, no doubt, had something to do with the cases reported by Drs. Collins, Meigs, and Nourse.

In breech presentations we find on abdominal examination that the head is at the fundus; the fetal heart sound is heard above the umbilicus. In vaginal examinations we must distinguish between presentations of the whole breech and footling presentations. Of the breech we should be able to recognize the spinous processes of the sacrum, the arms, and the genital cleft. In boys, the scrotum often becomes enormously distended, which may lead to confusion if the possibility of the fact is not borne in mind—as is evidenced by the physician who was about to apply a ligature to the pedicle and remove a supposed cyst of some sort which was delaying labor, a further investigation revealed the breech. An insertion of the finger in the rectum will clear up a cloudy diagnosis. With all these aids for our instruction, we should be able to recognize the breech.

These presentations work no very great hardship on the mother, except in the frequency of rapid extraction, but the mortality of the child is something alarming. These deaths were reported as one to three by the early writers on this subject, whilst the more modern authorities give the ratio as one to ten. I cannot recall one death in my own practice, and I am inclined to think the ratio far too high. I should like the experience of others in this direction, for these meetings should be experience meetings.

There is nothing that tests the skill of the obstetrician more than the management of these cases. When necessary, they require no less quick action except that of hemorrhage. Meddlesome midwifery is bad, and you should remain inactive as long as the natural processes are progressing satisfactorily. Yet you must be on the alert and prompt to foresee the very appearance of danger to the child, and to interfere as soon as the danger is manifest. You cannot avoid too strongly premature interference, since the use of traction instantly disarranges the delicate balance by which the normal attitude of the child is maintained.

We all understand that the maintenance of flexion in natural breech labor is due to the facts that the legs, arm, and forehead are driven down by the action of the intra-uterine fluid pressure upon their upper surfaces, and that this pressure is more than sufficient to overcome the friction of the pelvic walls against the lower surfaces of these parts; but when traction is made upon the breech, the additional force thus supplied is distributed to the members only through the knees, the shoulders, and the occipito-atlantoid articulation, respectively, while the very fact of this application—that is, the promotion of a more rapid descent—increases the force of friction exerted against the feet, the hands, and the forehead. Thus, you see, the difficulty following such a procedure would be extension of the legs, arms, and the head. But when interference is demanded, speed in extracting the arms and head is very essential. You should not delay longer than five minutes, at most, after the scapulæ present before bringing the mouth to the vulva. If you interfere, be prepared to deliver each and every member of the body as they approach the pelvis. Now, unless nature is likely to fail, and the best chances for the child have been lost, is it safe for operative interference, and then it must be immediate. We should have an assistant ready to apply suprapubic pressure to the head, if rapid extraction is necessary and the life of the child in danger. When delivery is imminent you should have your patient assume the lithotomy position,

Digitized by Google

and slightly under the influence of an anesthetic. Keep close watch of the fetal heart, for there is great danger from compression of the cord, but when you reach it, its pulsation should be your guide. When the buttocks emerge from the vulva you should wrap them in a warm sterilized towel, protect your perineum, and when the knees appear you should reduce the bulk of the presenting part by flexing out the legs. As soon as the umbilicus is reached, gently draw down the cord to reduce tension; hold the hips and body constantly forward towards the mother's abdomen, in the curve of Carus, to facilitate rotation and expulsion of the head, but use no traction. Bring down the arms as the elbow presents, and if you keep the body elevated sufficiently the head will follow without delay.

If the breech be arrested high up and the life of the mother or child is threatened, we may make traction upon the anterior groin with the finger, fillet, or blunt hook. You may apply forceps to the breech or you may bring down a foot.

If the arrest is low down it can usually be overcome by the use of the finger in the groin; by all means, use this method first; if you fail the fillet or blunt hook can be brought into use, and with a great deal less danger than in the high arrest, but I prefer the forceps in this latter procedure to the blunt hook. If you have an antero-posterior position, the tips of one blade should lie against the upper sacral vertebræ, while the other should rest against the flexor surface of the most accessible thigh. Should you have a transverse position of the hip, the forceps should impinge upon the femur just above or beyond the trochanter.

If you cannot deliver the after-coming head and arms by the very quick Deventer method, then use the combined traction on the face and the shoulders. Commence by pushing the elbow backward and toward the median line by the fingers; sweep it across the child's face to the vulva when you can extract; do the same with the other arm and be very careful of the shaft of the humerus; place the child astride the forearm whose hand is passed into the vagina until its first and second fingers lie upon the canine fossæ of the child. The other hand is hooked about the shoulders, its neck being between the first and second fingers, resting upon the supraclavicular region. You now make traction with your hand on the shoulders, and the other hand is used to preserve flexion of the head. The first traction should be in the line of the axis of that part of the pelvis in which the child lies, and when the head emerges your line of traction should sweep forward in the curve of Carus, which, when completed, the child will rest on the other forearm alongside the mother's abdomen.

There are so many complications that can arise that it is not possible for me in a short paper to mention all of them, but I would like to say this: Do not confine yourself to any one method in these cases, but combine or alternate between two or more methods, as you may elect. Should you meet with a contracted pelvis, I think the much praised Prague method a happy mechanism. You simply seize the feet with one hand and draw the body down as far as the perineum will admit; the other hand is hooked over the shoulders and traction is made by both hands simultaneously. The disadvantage, possibly, in this method is that the traction is made mostly on the neck, endangering the delicate structure of the spinal column, and thus less force can be used than in the combined effort.

If by any mismanagement the abdomen of the child is directed to the front and the chin rests at the symphysis, use your Prague method.

If your Deventer, combined, or Prague methods fail, you resort to the use of the forceps, applying them beneath the body of the child.

I will conclude by submitting the following indications for the use of the forceps in the after-coming head:

1. In all pelves where the diameters are below the normal measurements.
2. When the head is in an immovable position, with chin fixed over the symphysis pubis.
3. When the head is in the superior strait, with chin to the front.
4. When the head is locked at the pubis, but where flexion is imperfect and fixation of the frontal part of vertex is the result.
5. When the face is fixed anteriorly, with chin locked.
6. When the face is fixed laterally.
7. In transverse and oblique positions of head.
8. Where the head is laterally rotated and deeply fixed in the pelvis.
9. In great narrowness and rigidity of the soft parts, where the hand cannot be introduced, or where the fingers soon become exhausted on account of the constriction.
10. In too large heads—as hydrocephalus.
11. In placenta previa and eclampsia.
12. When the extractive methods have been tried and proved insufficient.
13. When the fetus is dead.
14. When the head has been torn from its trunk.

MENINGOCELE, WITH REPORT OF A CASE.*

By JOHN PRENTISS LORD, M. D.,

OMAHA, NEB.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF SURGERY, CREIGHTON MEDICAL COLLEGE; ATTENDING SURGEON, ST. JOSEPH HOSPITAL; AND CONSULTING SURGEON, PRESBYTERIAN HOSPITAL.

The subject to which I invite your attention is a condition, the result of an imperfect development in early intra-uterine life, and is the least common of those congenital tumors about the scalp characterized by a defect in the bones and a protrusion

* Read before the Medical Society of the Missouri Valley at Council Bluffs, September 17, 1896.

Digitized by Google

of the cerebral membranes, which contain more or less normal cerebral contents.

The varying character of these tumors has given rise to their classification as meningoceles, those containing cerebro-spinal fluid only; encephaloceles, those containing cerebral substance and cerebro-spinal fluid; hydrencephaloceles, the same as the latter, except that the cerebral portion contains ventricular fluid, because of a direct connection with the ventricles. The authorities claim this to be the most frequent, as well as the most fatal, of these tumors, all of which always had, and still maintain, a very high mortality, even among the most favorable cases.

The cases being very uncommon, and only the most favorable, proper ones, for operation, and operation justifiable only and practiced since the dawn of modern surgery, leaves the literature somewhat meager on this subject, which is presented to-day for these reasons.

The median line is the most frequent situation, especially the occipital region. Then the fronto-nasal, sides, and base of the skull, in order named. But observations show about seventy-five per cent in the occipital region.

To quote from the American Text-book, meningocele is usually cystic in its feel, is translucent, fluctuates, rarely pulsates, is more or less pedunculated, generally becomes tense in forced expiration, and is easily reducible. Encephalocele is usually small, is opaque, does not fluctuate, pulsates distinctly, has a wide base, becomes more tense in forced expiration, and symptoms of pressure are produced on attempting to reduce it. Hydrencephalocele is generally large, is lobulated, is partially translucent, fluctuates distinctly, pulsates but rarely, is usually pedunculated, is made only slightly more tense in forced expiration, and is not reducible.

All three forms are apt to be combined with other deformities, and paralysis often accompanies hydrencephaloceles.

Treatment.—As a rule, hydrencephaloceles are not amenable to treatment. The child, fortunately, dies early. The other two forms hold out more hope, especially if they are small. Sometimes an encephalocele, by retrograde development, may be changed into a meningocele, and occasionally by gradual concentric ossification, resembling that of the fontanelles, the bony aperture is lessened and may even be closed. The intra-cranial communication with the interior of the sac may be narrowed and finally obliterated, thus partially or completely effecting a spontaneous cure. Until the late improvements in cerebral surgery nothing was usually recommended in the way of treatment, certainly not unless there was danger of rupture.

A number of successful cases of excision, however, have been recently reported, and unless the size of the tumor or the condition of the patient forbid, this should be attempted, of course with all the antiseptic care bestowed on all other brain operations. Enough scalp should be preserved to make sufficient flaps to close the opening. If operation be thought inadvisable, electrolysis may be used as a substitute. Pressure and the injection of Morton's fluid (iodine gr. x, potass. iodid. gr. xxx, glycerin oz. j) may be tried, but with little prospect of benefit.

I quote also from Dennis system. In some cases developmental defects have been observed, such as microcephalus, porencephalus, hydrocephalus, etc. The base of a meningocele is usually broad, but seldom pedunculated. The tension of the contained fluid is easily influenced by efforts on the part of the patient, such as crying, coughing, etc. On the other hand, brain symptoms are less likely to be produced by pressure than in case of encephaloceles. During sleep the tumor is reduced in size.

A large proportion of patients with this congenital defect die soon after birth, often of marasmus. Occasionally the presence of the tumor is the cause of death during delivery, or it requires some mutilating obstetric operation. On the other hand, patients with well-developed brains, having congenital meningocele, often develop well in every other respect, although the tumor may grow relatively rapidly or slowly, and thus extend the

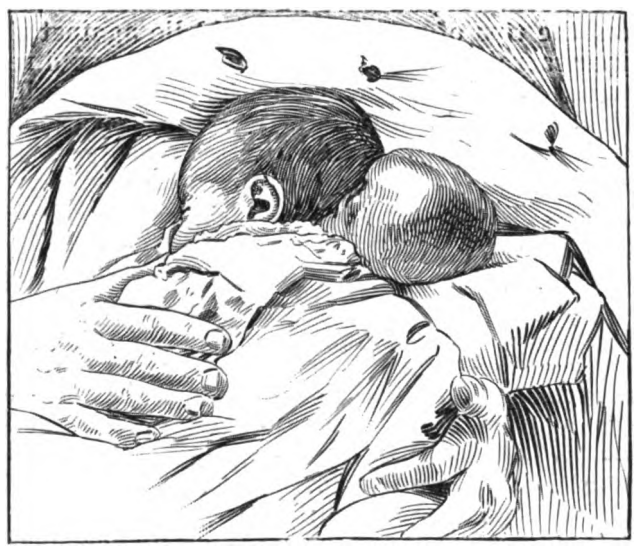


Fig. 1.

area involved. Not infrequently the sac gives way spontaneously, and the fluid is evacuated either slowly or rapidly. This practically always gives rise to purulent meningitis, of which patients die. The principal danger then, pertaining to meningocele, is spontaneous and accidental rupture of the sac, although as a rule these tumors grow slowly or present such thickening of their surroundings as to be reasonably protected.

Treatment.—Treatment should, first of all, be directed toward protection against spontaneous rupture of the tumor. This may be done by mechanical protection of some kind, with starched bandages, or with some plastic material, or in cer-

Digitized by Google

tain instances simply by enveloping the head in cotton. Radical treatment has been tried many times and in many ways. All sorts of efforts have been made by puncture, incision, ligature, extirpation, and also by injection, none of which have as yet given very favorable results.

It happened to Leasure to heal hydrencephalocele by puncture and compression. The cases in which one most desires to render help are those where the greatest difficulties are present. Many cases of small anterior cenencephaloceles may be left alone, or at least interference may be indefinitely delayed. So far as the remaining forms are concerned, compression, with or without puncture, has given generally the most satisfactory results. Most of these cases present in such a way that on mechanical grounds alone extirpation is in most respects simple and easy of performance; but there are cases in which absolute aseptic precautions are nearly or completely impossible, and these cases, therefore, are bound to succumb from purulent meningitis in a most discouraging way. The ligature has in a few instances been successfully applied. Not a few times, as the result of mistaken diagnosis, has free incision been made, with speedily fatal results. The same is true, also, of iodine injections. In a general way we would say that while in individual instances radical efforts may give some promise of success, the most satisfactory method has been found to be puncture with a fine needle, repeated as may seem wise, and followed by continuous compression, arranged as the ingenuity of the surgeon may best devise.

My auditors will pardon these rather extended quotations; your indulgence serves me several purposes, *i. e.*, allowing me not only to refresh your minds, but to present this portion of the subject from these accepted authorities, showing a somewhat unsettled state of professional opinion upon the course of procedure to be followed in the surgical treatment, at the same time giving you better authority than myself, and thus enabling me to call your attention to a difference of observation between the writers—Roswell Park in the American System, by Dennis, and W. W. Keen (presumably) in the American Text-book.

The former observes that meningoceles are usually broad at the base and seldom pedunculated. We would therefore agree with him that a tumor with a broad base might better be treated by aspiration and compression. Whereas Keen says that meningoceles are usually pedunculated, and recommends excision. We can therefore readily understand why somewhat different views are held by these distinguished authorities, and while the indications seem to be quite clear for the radical treatment in a pedunculated and uncomplicated meningocele, notwithstanding its rather shady prognosis, there is not the same clear indication and freedom from mechanical difficulties in the tumor with a broad base.

The history of the case under consideration is as follows: Female child, five weeks old, well developed and healthy, except digestive disturbance, the result of exclusive artificial feeding. The mother and father were both robust Germans; the infant was normally delivered; the tumor at birth was about the size of a walnut and developed very rapidly. The photograph represents the condition as first seen by me. The parents were from the country and could not remain with their child, and therefore went home, to return in a few days; sickness in the family delayed their return ten days. The case was admitted to the hospital June 25th, 1895. The tumor was much larger than on former examination, ten days previously, as represented in the photograph. It was much more tense and its walls seemed very much thinned and almost ready to rupture, especially in the right superior region, where the tumor shows a somewhat lobulated appearance.

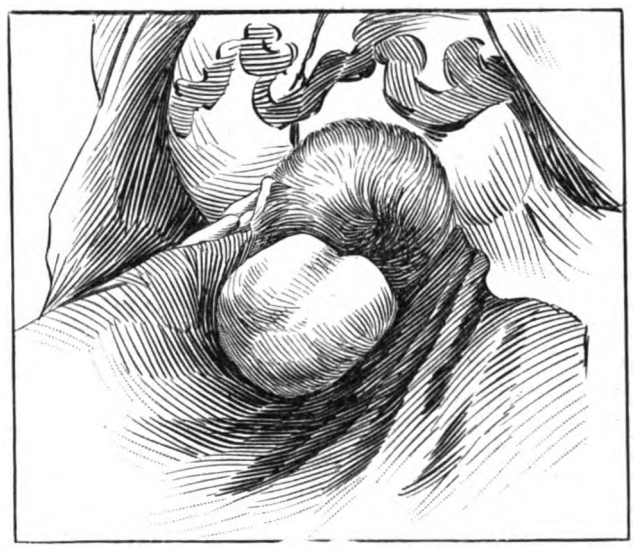


Fig. 2.

For the purpose of relieving the extreme distension, and to guard against the effects of the complete and sudden withdrawal of the fluid, it was punctured with a fine aspirator needle, and two ounces of clear and limpid cerebro-spinal fluid was the result. The writer was possessed of the fancy that this was a proper preface to the operation of extirpation on the following day. In the vicinity of the pedicle, which was about one inch in diameter and over the occiput, there was considerable oozing from the scalp and the skin over the neck, as a result of the contact of the tumor with these parts. To make any attempt at antiseptic preparation seemed inexpedient, and none was made. On the following day, under chloroform, the parts were properly cleansed, though the scalp about the pedicle was shaved with difficulty. The tumor was evacuated of eleven ounces of cerebro-spinal fluid by the use of a trochar and manual pressure, care being exercised to maintain the intra-cranial pressure by constriction of the pedicle, first by the fingers and then by

Digitized by Google

a suitable forcep in the hands of a careful assistant, that no injury might be done the parts. A cuff of scalp sufficient in extent was dissected to cover the pedicle, which was carefully isolated and tied with a transfixion ligature of chromicised catgut and severed at a safe distance. The scalp wound was united over the stump with a fine catgut suture, sterile gauze compresses were secured by a firm bandage, and though the union was not wholly primary, it was perfectly healed when the case was discharged, just two weeks later.

There was nothing of interest during convalescence, except that after the second day there was considerable tendency to hydrocephalus, as shown by fullness, amounting to marked bulging, at the anterior fontanelle, and discomfort, manifested by restlessness and crying. I had resolved to aspirate had this continued, but it gradually subsided and the child seemed well when discharged, except for the digestive disturbance before alluded to.

Six weeks later it was brought to the office suffering from an entero-colitis, so advanced that its death was prophesied within forty-eight hours. There was no preternatural fullness of the encephalon at that time and the wound result was perfect. Compression over the defect had been maintained.

Though I claim this as a perfect result, I am not prepared to say that in another similar case I would not pursue the course recommended by Park, to aspirate and compress, as I think it reasonable to expect that these tissues would contract sufficiently to obliterate the tumor, and the same result obtained by a less prejudicial process, when we consider the condition and prognosis in all their bearings.

CLINICAL NOTES ON EUCAINE HYDROCHLORATE.

By W. L. DAYTON, M. D.,

LINCOLN, NEB.,

OPHTHALMOLOGIST TO ST. ELIZABETH'S HOSPITAL, AND OCULIST FOR BURLINGTON & MISSOURI RIVER RAILROAD.

Prior to 1884, when Dr. Carl Koller, who at that time was assistant in Dr. Snellen's clinic at Utrecht, announced his discovery of cocaine, a local anesthetic, and demonstrated its utility upon all mucous membranes, no local anesthetic existed in our armamentarium. Since this time, however, numerous drugs have been used, experimentally, for this purpose. None of these have ever arisen to the position of a rival of cocaine until the recent announcement of Schering & Glatz that eucaine hydrochlorate possessed all of the advantages, with none of the deleterious effects, of cocaine.

Eucaine hydrochlorate is upon the market in the form of white, shiny scales, slowly soluble in cold water. When heated the solution becomes opalescent, but clears upon cooling. It has a very bitter and acrid taste. A two per cent solution dropped into the eye causes a sharp burning pain, lasting for probably one minute. There is increased hyperemia of the conjunctiva, which usually lasts for ten or fifteen minutes; repeated instillations made at intervals of two minutes are not followed by pain nor further increase in the hyperemia.

A ten per cent solution applied to the nares or throat does not cause pain; primarily there is an increased hyperemia, which gradually subsides by the time anesthesia is complete. Owing to the burning complained of by the patient, I never use stronger than the two per cent solution for the first instillation, followed, if necessary, by a four per cent solution. I have found the weaker solution sufficient for the removal of foreign bodies from the cornea; in tenotomies and probing of the nasal duct I use a four per cent solution.

In one case of partial tenotomy, after having, as I supposed, thoroughly anesthetized the eye by one instillation of a two per cent solution of eucaine, followed at intervals of two minutes by three applications of a four per cent solution, I grasped the conjunctiva with the forceps, when the patient cried out with pain, and I was obliged to desist until I had thoroughly anesthetized with a four per cent solution of cocaine, when the operation was continued to a painless termination. It is barely possible that the solution was not of sufficient strength, as Dr. Robert Brudenell Carter, consulting ophthalmic surgeon to St. George's Hospital, London, reports in the London *Lancet*, July 11, 1896, the successful use of a five per cent solution in a cataract extraction. I have used five per cent and ten per cent aqueous solutions of eucaine in operations upon the naso-pharynx and throat, and in no case have I had any constitutional disturbances. The heart's action was slowed, the pulse became stronger and fuller, there was no pallor of the face nor lips, no nausea or faintness in any of the cases where I have used the strong solution. In one case of cauterization of the follicles at the base of the tongue, after four thorough applications of a ten per cent solution of eucaine the patient suffered severe pain in the operation. The next cauterization, nearly a week later, was made under a five per cent solution of cocaine with very little pain; as expressed by the patient, "this is nothing compared with the other time." In another case, for the removal of an hypertrophy of the middle turbinate, I applied in the nose pledgets saturated with a ten per cent solution of eucaine, changing every five minutes for a period of thirty-five minutes. This patient had had previously used in her nose a solution of cocaine (the exact strength I do not know). Its action was very depressing, causing very alarming symptoms, which had so depressed her that the dread of having it used again, with possibly the same effect, was appalling to

Digitized by Google

her. Circumstances in this case prevented my stopping the application after having begun, and I was compelled to continue it, as above stated, for thirty-five minutes. There was from six to eight grains of eucaine used, and although the operation was rather prolonged, the patient experienced very little discomfort. The pulse remained full and strong, somewhat slow; no pallor nor nausea. When the operation was finished she complained of faintness and a desire to lie down, yet at no time was it evident that it was from a constitutional effect of the eucaine.

Thus far I have used a ten per cent solution of eucaine in the naso-pharynx and throat in upwards of twenty-five cases, and in none of these have I had any noticeable constitutional effects, save as named above.

In ophthalmological work, in my opinion, it will never displace cocaine. It has but one advantage —it does not cause mydriasis nor interfere with the accommodation; while it has several disadvantages—it is slower in its action, is more painful, and produces a decided irritation of the palpebral conjunctiva. I admit that in cases of dacro cystitis or stricture of the nasal dust, where we may desire to use the anesthetic freely, eucaine may be used advantageously. But for all other cases in which cocaine has been used heretofore it will beyond doubt continue at the head of the list, and the favorite anesthetic in the hands of the ophthalmologist.

The field of eucaine has a wide scope; it can be used in the naso-pharynx, throat, and buccal cavities with little or no danger of ill effects from absorption. Dentist Kiesel, of Berlin, highly recommends the injection of a ten per cent solution of eucaine for the painless extraction of teeth, and gives the following directions for its preparation and use: First, dissolve one gramme (fifteen grains) of eucaine in ten grammes (or two and one-half fluid drachms) of distilled water, and boil the solution. The solution should be perfectly clear and is best preserved in a glass-stoppered bottle. Second, thoroughly disinfect the mucous membrane before the injection by cleansing vigorously with tampons of absorbent cotton soaked in peroxide of hydrogen or some other antiseptic solution. Care must always be taken to exclude any air contained in the syringe. Third, insert the needle of the syringe close to the edge of the gum, never higher than half way between the buccal and alveolar membranes. Enough fluid must be injected to whiten the mucosa in the immediate neighborhood of the puncture and cause a slight elevation, and no more. The dose of a single inection is from three to six drops of the ten per cent solution. Both a buccal and a lingual injection must be made. It is very important that the injection be not made at the point of junction of the alveolar and buccal mucous membranes. Extraction may be done in from one to two minutes following the injection. After the bleeding has ceased the remaining eucaine solution must be removed by puncturing the swelling with a needle and making digital pressure upon the gum. The edema thus set up is entirely harmless and disappears quickly and without pain, and is never followed by any after effects.

The danger in the use of cocaine appears to me to be greatly exaggerated. I venture to state that in the majority of cases where there are alarming symptoms following its use, it has been either carelessly applied or an excessive amount of a uselessly strong solution used. Be this as it may, the profession at large will unanimously welcome the advent of a reasonably safe local anesthetic. It remains to be seen whether eucaine hydrochlorate will stand the test and fill the requirements of an ideal local anesthetic. At the present it is in the experimental stage, and from now on we may expect to find clinical reports of its use, when, if up to the standard of usefulness claimed by its promoters, it will be welcomed as a new child born to our profession and a boon to suffering mankind.

MYELITIS.*

By J. M. AIKIN, M.D.,
OMAHA, NEB.

Myelitis, acute and chronic, is not an uncommon disease, but its common synonym, softening of the cord, is inaccurate, because such a condition does not necessarily follow inflammation and does occur in the total absence of any inflammatory process, as in necrosis from occlusion. No other vital structure of the body is so sparingly supplied with blood, consequently its recuperative powers are slower, and functional activity after damage by inflammation is long in coming back to the normal, and in many cases is never fully restored.

The onset in the acute is from one to three days or as many weeks, while a corresponding number of months or years for its full development would certainly deserve the term chronic.

The location and extent of the pathological condition gives rise to the terms cervical, dorsal, or lumbar, and transverse, focal, disseminated, etc. Also, if it is thought the primary affection is in the nerve elements, the distinction parenchymatous is applied as differing from interstitial, which involves all the elements or is limited to the connective tissue where the vascular disturbance takes prominence.

The dorsal location, transverse type, and connective tissue pathological disturbance obtains in most cases.

A full recognition and correct interpretation of the symptoms must be our guide to the special or general distribution of the affection; and our di-

* Read before the Omaha Medical Society, June 8, 1896.

Digitized by Google

agnosis is facilitated by remembering that pain or tenderness on pressure, or by the application of moist heat or faradism along the vertical column, is proof of gray cell deterioration, and the tender spots locate the disease.

Causative factors in every case are not easily determined, but the day has passed when we may with presumption relegate to a neuralgic or rheumatic peg every painful expression that cannot be traced directly by ocular demonstration to a dissolution of tissue.

He would be an unwise physician in these days of progressive medicine who would search no further than the knee for the cause of pain in the patellar region, were there neither lesion nor deformity visible.

It is not many years since our teachers—with great satisfaction—taught us that loss of motion on one side of the body was hemiplegia, but of the pathology they were silent. Paralysis of motion in one or both legs is now quickly diagnosed as a spinal affection; but when a patient complains of weakness in the legs, inability to walk as far or stand as long as in times past, soreness or aching of the muscles, with transient shooting pains, or a tingling or numb feeling in the feet or hands, and diminished or exaggerated reflexes, we too often cease searching for nature's modes of communicating to us the existence of disease, by showing function defects, and go at once to our neuralgic or rheumatic peg. Or, if pain persistently plays around the parites of the thorax or abdominal cavities, we think of a lung affection or some gastric disorder as the cause, without serious thought of having a peripheral expression from a ganglion or nerve root affection at the cord.

Again, a person indulges in some violent physical exercise, perspires freely, cools off quickly, and the next day feels languid, his muscles stiff, and some dull pain in the lumbar or gluteal region, with anorexia and slight febrile disturbance, and we are apt to quickly regard so common an occurrence as a case of "catching cold," and it has settled in the back, producing lumbago.

We are familiar with several cases of the preceding general description, which the subsequent clinical history proved by indisputable evidence were cases of acute myelitis, and had they been recognized and treated as such, would have saved the sufferer many months and years of painful helplessness. The most conspicuous symptoms are those which show interference with the functions of the cord, and of these motor weakness is most noticeable and is expressed locally in a particular group of muscles, as the extensors of the leg, detrusor of the bladder, or sphincter of the rectum, etc. If we introduce the finger into the rectum and discover that the initial relaxation is followed immediately by a firm tonic contraction, we have proof positive that there is no affection existing in the anal center in the lumbar enlargement. A dilated pupil, also retarded heart action, without positive evidence of the cause, may justly lead us to suspect, at least, a functional disturbance in the cervical cord, while a temporary abolition of the knee jerk may occur from an acute lesion in any part of the cord, but if the lesion is above the lumbar enlargement, the reflex will return at an early date; thus a second or third observation of a patient may lead the positive diagnostician to a reconsideration of his numerous cases labeled *tabes dorsalis.*

Constipation is common in cord disease and is often greater than can be accounted for by the loss of power in the abdominal muscles, but pain in the back of more than temporary duration is usually of gastric origin and reflex in character through the sympathetic. Pain in the spine *per se* would be poor evidence of myelitis, but the combination of symptoms indicate the seat of lesion, and their mode of development the character.

The following clinical history, from my casebook, of a patient now under our observation is illustrative of a sub-acute but now chronic myelitis: Mr. E. B., age 40, American, married and by occupation a farmer, came under my care in June, 1896. Family history excellent, and patient's history prior to date of present complaint exceptionally good, being robust in health and physique and free from any prolonged sickness or the subject of excesses in liquor, tobacco, or venery.

Eight years since he noticed a gradual onset of diarrhea, reaching its maximum intensity two years later, varying in character for four years and stationary for the past two years. Weight decreased from about 180 pounds to 130 pounds. Appetite usually good and for a variety of food, but sleep disturbed and much soreness and stiffness of the back muscles on rising in the morning; also much pain, of varying intensity, around the walls of the abdomen, radiating to the linea alba; frequent desire to micturate and a speedy demand to go when called, else the urine would void itself.

Upon a physical examination we found all the vital organs of the thorax normal, but a pulse of 86, temperature 99.5; total abolition of knee jerk or foot clonus; partial paralysis of the sphincter ani; marked tenderness on pressure from the tenth dorsal to the fourth lumbar; and inability to stand erect when eyes are closed. Further inquiry elicited the statement that great fatigue prevailed in the lower extremities after much walking, and the condition was not lessened if he rode in a lumber wagon or on a steam or street railway car, while one day's work riding his mower caused him two weeks in bed, and a less time on the corn planter necessitated two or three days' rest. This case is one of those neglected and almost hopeless list of cord affections in which complete recovery would be a miracle, yet we are glad to report at this date, and for one month past, his bowels and bladder action are normal, food digested and assimilated, sleep refreshing, pain greatly diminished, knee jerk returning, spirits greatly revived,

Digitized by Google

and a gain of twelve pounds in weight, but symptoms of cervical deterioration are developing, as shown by pain in the chest muscles and interference with respiration.

Our treatment of this case was counter irritants to spine, rest on a hard bed, avoidance of all work or modes of locomotion productive of a jarring or vibratory motion, nutrient treatment, and a liberal supply of wholesome food.

SURGERY OF THE GASSERIAN GANGLION, WITH DEMONSTRATION AND REPORT OF TWO CASES.*

By J. B. MURPHY, M. D.,
CHICAGO, ILL.

In speaking of the surgery of the gasserian ganglion, I will confine my remarks largely to the technique of the more recent operation, after reviewing some of the results of operations which have preceded or led to the operation which is adopted at the present time. The gasserian ganglion, situated, as it is, on the petrous portion of the temporal bone, is in a very inaccessible position. It is desirable in some cases to remove this ganglion for the purpose of curing intractable neuralgias of the facial nerve, or what is commonly known as migraine. As you know, all methods of treatment by internal medication with all the varieties of anodynes, and more recently the medical treatment now in vogue, large doses of castor oil, have failed. If a case had been relieved by the anodyne treatment, it was only temporary, and was followed by another attack of increased intensity. The operations for its relief may be classified as follows: 1. Division of the branches of the trifacial in the face or mouth. 2. Division of the nerves at the base of the cranium (Kroenlein). 3. Extraction of the ganglion from the base (Rose). 4. Intradural extraction of the ganglion (Horsley). 5. Extradural excision of ganglion (Hartley-Krause). The operation most effectual and least dangerous before the present one (Kroenlein's) consisted of division of the zygomatic process, turning it down with the most important muscle, dividing the coronoid process of the inferior maxillary, dividing the temporal muscle and reflecting it upon the cranium, finally dividing the nerve at the base of the cranium, that is, dividing the third branch of the nerve at the foramen ovale and the second branch at the foramen rotundum. The operation was almost as extensive and, if not as dangerous, was more difficult than the operation for the removal of the ganglion itself. The results with this operation were only temporary relief in a very large proportion of cases; for that reason it was deemed advisable to attack the nerve within the cranium. Dr. Rose, of London, in 1890, was the first to open the cranium from the base. He followed the same procedure as Kroenlein, making a division of the parts mentioned, passing into the base of the cranium at the foramen ovale, and chiseling out an opening sufficiently large to permit of the extraction of the ganglion through the opening. The opening was necessarily small, consequently the operator had very imperfect light, and it was very uncertain whether the ganglion was extracted *in toto* in any of these operations. The Rose method was performed, I think, for the first time in America by Dr. Edmund Andrews of Chicago. He has performed the operation three times. On account of the difficulty and dangers of this operation, coupled with the uncertainty of incomplete extraction of the ganglion, it was necessary to abandon the procedure. The next method was devised by Victor Horsley, of London (1891), who reasoned that as the ganglion was situated between the two layers of the dura, with its roots on the inner side of the dura at the base, it could best be reached by incising the dura and elevating the convolutions. In the Horsley operation an opening should be made in the cranium above the zygomatic arch, with a horseshoe-shaped osteoplastic flap; finally incise the dura and elevate it with a retractor, as I show you here. Pass this long curved retractor beneath the convolutions and gently elevate the brain, so that the ganglion and motor root on the inner side can be reached and extracted from the side of the medulla. We can readily see that this is a difficult procedure, as the brain is not a resisting substance and the retractors tear or lacerate the brain tissue before the ganglion is exposed at its base. The operation was performed by Horsley with a fatal termination.

In the latter part of 1891 Frank Hartley, of New York, conceived the idea of attacking the ganglion from within the cranium and without the dura. This is the operation to which I shall direct your attention to-day, and is the one which I will perform, with the assistance of Dr. Mayo, so that you may see how readily the ganglion and root of the nerve can be reached and extracted by this method.

We will next consider the dangers of the operations. In the operation from the base (Rose's operation) the dangers were found to be hemorrhage and infection; in the majority of fatal cases found in the literature on the subject, infection was due to injury to the eustachian tube, as the channel which the surgeon follows in getting to the base of the cranium at the foramen ovale is in close proximity to that tube. The mortality of the operation was eighteen per cent. In Horsley's operation there was danger from hemorrhage, infection, and mutilation and laceration of the brain. He performed the operation once and the patient died six hours after.

We will now consider briefly the technique of the Hartley operation. In this operation, after

* Stenographic report made at the meeting of the Mississippi Valley Medical Association, at St. Paul, Minn., September 15, 1896.

Digitized by Google

we have made our incision through the skin and exposed the bone, we chisel an opening through the cranium, and if we have a De Vilbiss instrument we can remove as large a piece of the cranium as we desire, in a very short time. The chisel of Hartley or Krause's saw, which is very convenient, may be used. The De Vilbiss instrument has the advantage that it does not cut the dura when the instrument is pressed; when it is opened it pushes the dura out of the operative field. Last week I used it in excising a large depression in the skull. It worked admirably and saved time. Make an omega incision (see Fig. 1) in the flap and cut the bone so that the base of the other incision will be just above the zygoma; elevate the bone and its fractures below the level of

Fig. 1.—Primary incision.

the zygoma. Press the Kocher blunt dissector between the dura and bone, lift the bone gently, and push the dura back. As soon as this is done we are liable to have hemorrhage from the middle meningeal artery. Should this occur we can compress the bone with forceps or push the artery into the canal and introduce a catgut plug. The hemorrhage from the dura is considerable when the flap is elevated. The flap is now turned down and allowed to remain. As soon as the bleeding has ceased, pass the finger along beneath the dura, gently elevating it until the base of the fossa is reached. At this stage there is profuse hemorrhage from the vena santorini and the arteria meningea media. This artery occasionally enters the base through a separate foramen, and has been ruptured in elevating the dura from the bone. Whenever rupture takes place the foramen should be packed with catgut and allowed to remain. The venous hemorrhage may be so excessive that it may become necessary to stop the operation at this point and plug the fossa with gauze, allowing it to remain three days before completing the operation. Excessive hemorrhage was encountered in three of Dr. Keen's cases. The doctor, in commenting on the cases, stated that he introduced a piece of gauze sixteen by twenty inches, which did not produce sufficient pressure on the brain to cause unpleasant symptoms. As soon as the base is exposed, introduce the retractor, which holds up the dura. As the specimen is passed around, notice the foramen ovale where the inferior maxillary division finds exit, and just in front of it the foramen rotundum for the superior maxillary division. After both openings have been exposed, divide the layer of the dura between the two divisions of the nerve, allowing the periosteal portion to remain attached to the bone beneath the roots of the nerves. The upper layer can then be elevated from the surface of the nerves and ganglion with very little danger of perforating it. This is a very important point in the operation. Proceed along the upper surface of the nerve to the ganglion, which is situated between the two layers of the dura, one beneath and the other above. As soon as this point is reached the blunt dissector is used to elevate the dura; with it separate the two layers of the dura, following along up the nerve. Peel the dura off until the ganglion is thoroughly exposed. After the dura is peeled off a short distance it may possibly be torn; there will then be an escape of cerebro-spinal fluid. If the sinus be torn the hemorrhage will be profuse. Control it with the finger or with a compress on the retractor. Cleanse the cavity with a sponge until the parts become dry. With two of these retractors the sinus can be readily compressed if torn. The opening in the dura can be compressed in the same manner to suppress the flow of cerebro-spinal fluid. If necessary the optic division of the nerve can be removed; it is difficult, as it is situated in the wall of the cavernous sinus. If an endeavor be made to remove the optic division from the cavernous sinus, the chances are the sinus will be opened and hemorrhage will follow, thus compelling the suspension of the operation for the time being, to be completed at another sitting. As soon as the ganglion is exposed, pass the blunt hooks which we have for that purpose under the roots of the nerves, elevate the nerves, and make considerable traction from the openings toward the center. As soon as the roots are thoroughly drawn in and divided close to the foramen, elevate the ganglion from its fossa and grasp it with a pair of large hemostatic forceps. I have found the eight-inch forceps of Billroth good for this purpose. The nerves being divided, the distal ends are pushed out of the foramina. This is done to lessen the possibility of subsequent regeneration of nerve tissue in case the ganglion is not completely removed. When the roots are divided remove the hooklets which have been used for the purpose of elevating; separate the roots and the ganglion from the periosteal portion of the dura by gently elevating it; make a turn and a half of the Billroth forceps on the ganglion and

Digitized by Google

the motor root will come in one mass with the ganglion.

In the first case which I operated I was annoyed considerably by hemorrhage. It retarded me for five or six minutes after I had the nerve exposed and had placed the forceps on the ganglion. As soon as the hemorrhage was under control I proceeded and the nerve was extracted.

This method is very advantageous, as it affords an excellent view of the field of operation. I like the position suggested by Keen, *i. e.*, placing the patient on the back and operating from the side. In this position we can have a strand of gauze in the lower part of the wound, which will siphon the blood out as rapidly as it appears. When the ganglion is extracted it should be examined to see if it has all been removed. The ganglion is not a large body; it is much smaller than is generally supposed. In some of the recorded cases a part of the ganglion was removed. This should not occur if the dura be retracted sufficiently with the blunt dissector. In both of my cases the permanent arrest of hemorrhage was produced with a plug of gauze, which was removed forty-eight hours after the operation through a small opening left in the bone. The osteoplastic flap was replaced and retained by periosteal and cutaneous sutures. In the second there was some escape of cerebro-spinal fluid when the gauze was extracted; the provisional suture which was inserted at the time of the operation was tied and prevented the further loss of fluid. The danger of injury to the brain is not great. The danger from sepsis when the dura has been lacerated is considerable; in these cases the drain should always be used. It is surprising in such cases how quickly patients rally from the operation. The first patient on whom I operated left the hospital two weeks after the operation. The first operation consumed forty-two minutes, the second fifty-seven. This is an operation of considerable anxiety, because we are at a disadvantage in controlling hemorrhage; if the carotid be injured its control is almost impossible.

As to the results obtained from operative interference: There have been fifty-seven cases collected up to date, and of this number there were five deaths. Two of the patients were seventy years of age. One died shortly after the operation as a result of shock, the other six days after the operation, without any special symptoms. Nothing was revealed post-mortem to account for the patient's death. For an operation which affords relief from such great suffering the mortality is small, one in eleven, and an idea of the suffering of these patients can only be gathered from those who are afflicted. They are willing to undergo any operation in the hope of obtaining relief. One of my patients, when informed of the dangers of the operation, expressed himself as follows: "Anything you can get out of this better than death is clear profit."

Fig. 2 shows the line of complete anesthesia three weeks after the operation.

Recent reports from my cases show that there has been no return of the neuralgia, and neither have they suffered from ocular symptoms.

Mrs. Kate M., Lincoln Neb.; housewife; age 53. Family history: Mother 85 years old, living, and healthy; father deceased, the result of an accident; two sisters are living and enjoying good health; husband and one boy are well. Patient enjoyed excellent health until sixteen years ago, when she was attacked with the present trouble. Was married at the age of twenty. Had one

Fig. 2.—Line of complete anesthesia.

child; no miscarriages nor abortions. Never suffered from gout, rheumatism, nor any kind of disease. Had sustained no injury to the head. Had not suffered from severe emotional excitement nor mental over-taxation previous to present illness. Menstruation normal.

Present history: Sixteen years ago, after a hard day's work, patient was attacked with a "stroke" or "shock" which prostrated her to the floor. The "shock" consisted of a severe sharp pain in the entire right side of the face. The pain was intense and lasted about ten minutes. She could not open her jaws and remained for a time as though completely paralyzed. This was the onset of the attacks of chronic neuralgia for which she now seeks relief. The "attacks" occurred every few hours in the beginning, but for the last six years a spasmodic contraction of the muscles of the right side of the face, with closure of the right eye, accompanied by intense pain, occurs every fifteen or twenty minutes, day and night. Excitement, pressure on the face, or a slight draught will bring on an attack. In the interval between the attacks the face is painful. The right half of the tongue appears to be the most painful spot.

Digitized by Google

For that reason conversation is carried on in a low muttering tone, and has to be interrupted frequently when the attacks come on.

EXAMINATION.—No deformities or irregularities in the head or face; sight normal; nose free from obstruction. Teeth on the right side had all been extracted with the hope of relieving the neuralgia. No defect in the mouth or fauces; external meatus and drum normal. Heart and lungs normal; no irregularity in abdominal organs; pelvic organs normal; urine normal; no enlargement of glands; epitrochlear glands normal. The area of pain extends from right superciliary ridge down the entire right side of the face to the lower margin of mandible, from the anterior border of the ear forward to the middle line of the forehead, nose, lips, and tongue. An electrode placed over any part of the face produced intense pain.

The patient's condition was really pitiable, and when on the table, before the anesthetic was administered, she said: "Doctor, promise me that you will do one of two things; either cure me of this neuralgia or kill me."

OPERATION.—The patient was operated upon December 24th, 1895; chloroform was used. The head was placed in a somewhat elevated position and turned to the side. The details of the operation were as described above. The evening after the operation the patient was conscious and she said she was entirely relieved from pain, suffering only from the soreness at the position of the wound. Forty-eight hours after the operation the gauze packing was removed. A small quantity of serum, blood and detritus escaped, but no cerebro-spinal fluid. The patient expressed great relief after the gauze was extracted, as she said the pressure seemed to be taken out of her head. At no time did her temperature reach 100 degrees. Her improvement was very rapid. She was able to sit up in a week and in two weeks left the hospital. The accompanying cut shows the line of incision and also the line of anesthesia three weeks after the operation. A letter from the patient, dated August 20th, states that she has had no return of pain. The only inconvenience experienced is the absence of sensation on the right side of the face.

John G., Ossian, Iowa; male, age 52; German; merchant; married; several children, all well. Received a bullet wound in the army. Enjoyed excellent health up to seven years ago, when he began to have attacks of pain on the right side of the face. In the winter time he would have them every day, or at the most, every second day. In summer he might go for a week without an attack. The last winter they increased very much in severity and duration.

He is of phlegmatic temperament; responds slowly to questions; appears to be suffering from some mental disturbance. Complains of pain in an area about the size of a dollar above the right superciliary ridge. When the "attack" is on the pain extends over the greater portion of the face. Eyes, nose, mouth, and ears normal; has some digestive disturbance; lungs and heart normal; urine negative.

Date of operation, April 9th, 1896. Incision the same as described above. In this case the dura was opened and a considerable quantity of cerebro-spinal fluid escaped. The packing was withdrawn seventy-two hours after operation. That was also followed by a discharge of cerebro-spinal fluid, which was stopped by tying the provisional suture. The patient made a rapid recovery; the numbness of his face annoyed him considerable. There was no pain after the operation. The ganglion and root were removed in one mass; it was given to Dr. Evans for examination.

Information received from patient August 14th states that he is not suffering from pain and enjoys excellent health since the operation. In neither of the patients was there any inconvenience expressed from the loss of sensibility in the eye. Convalescence was rapid; the patient was up and about the room in a week and left the hospital three weeks after the operation.

Dr. A. J. Ochsner, of Chicago: The author has given us a most beautiful demonstration of a difficult operation, and one which in his hands, no doubt, will give a large measure of success. I hesitate to operate in these cases of facial neuralgia for the very fact that they are necessarily of a serious nature. I have recently had some experience in these cases in the use of castor oil. I have given this remedy in half ounce doses twice daily for ten days or two weeks at a time, and to my surprise it has thus far proven a most elegant remedy. As to whether the results will be permanent I cannot say, but no case has yet returned to its former severity. I should repeat the castor oil whenever there are indications of a returning attack.

OPERATIVE TECHNIQUE IN APPENDICITIS, WITH CASES.*

BY CHAS. C. ALLISON, M. D.

OMAHA, NEB.,

SURGEON TO THE PRESBYTERIAN HOSPITAL; PROFESSOR OF RECTAL AND GENITO-URINARY SURGERY, OMAHA MEDICAL COLLEGE, ETC.

Descriptive reference to the operative steps in appendicitis presupposes a knowledge of the pathology of this disease, including not only right iliac inflammation, but septic invasion of the general peritoneal cavity. A small hollow organ, placed in a dependent position, with terminal blood supply, without a chance of collateral circulation, with its drainage exit exposed to the trauma of fecal residue, its cellular elements lymphoid in character, and its constant bacterial fauna, represented by the dangerous and prolific bacilli, *coli communis*, is plainly an easy prey to inflammatory outbreaks, and nature's chance to establish harmless resolution is necessarily meager.

* Read before the Medical Society of the Missouri Valley, Council Bluffs, Ia., September 17, 1896.

Digitized by Google

The natural termination would therefore seem to be suppuration; that is to say, surgical, although with drainage, tissue resistance, and arrest of bacterial growth and colonization, the symptoms may ameliorate and the disease seem medical; yet this very termination leaves cicatricial embers in the form of a *locus minoris resistentiæ*, which, clinical experience teaches us, is readily fanned into a recurrence which may terminate less favorably. Armed with a diagnosis, therefore, and the conscientious judgment in a given case, that nature and medicine need surgical aid, prompt preparation should be made, and sterilization of everything may be accomplished in a home as in a hospital. The surgical indications are determined by the following pathologic conditions:

1. The early and the interval operations (without dense adhesions) require practically the same technique.
2. Operations for suppuration changes with adhesions.
3. Opening of large abscess, with or without removal of appendix.
4. Operation for general peritonitis.

In the first class the abdomen may be opened by separation of muscular fibers over the cecum, or by an incision to the right of the semi-lunar line of from one and one-half to two and one-half inches in length. The cecum is recognized by the longitudinal band, which will guide the finger to its termination, from which point the appendix may be easily found. Or, if the ileo-cecal junction be recognized, the appendix will be within an inch and a half of this point.

Ligature of the mesentery, followed by dissection of a liberal peritoneal cuff, with chromatized gut ligature of the muscular coat, and apposition of the inverted peritoneal tunic over the stump, completes this part of the operations.

Operations under these ideal circumstances afford a chance for Dr. Dawborn's complete inversion of the stump and apposition of the cecal peritoneum over its base.

In the second, or later class, the abscess must be carefully located, and the general peritoneal cavity protected by the careful packing of gauze about every side, after which the excavation of the pus and the search for additional pus cavities, with removal of the appendix, follows. This finished, with the constant vigil of cleanliness over the peritoneum, disinfecting and sterilizing the stump, local sterilization of the cavity and pockets by peroxide or bichloride sponging, 1 to 2,000, or by dry cleansing, is followed by drainage wicks placed deeply in the abscess cavity. Accurate closure of the wound, with waiting sutures inserted, finishes the operation.

The third class represents the more serious condition of large abscess, more or less gangrenous appendix, and friable gut. The abscess is best reached by an incision rather nearer the anterior superior spine than was described for class one. Evacuation of the abscess, followed by the repeated alternate use of hydrogen, peroxide, and hot saline or sterile solution, represents the modern means of cleansing the abscess cavity. A careful search for the appendix should be made, and its removal accomplished, unless attachment clearly imperils the protecting adhesions between the abscess and the peritoneal cavities. Drainage with gauze in the deeper and pelvic limitations of the abscess cavity brings us to the application of the external dressings. One point of grave importance remains. In many of these cases we are not sure of the condition of the general peritoneum. We cannot exclude the chance of slow leakage within a few hours prior to our operation. A case will best illustrate this point. A boy, æt. fourteen years, first complained on Sunday night. His physician, Dr. O. S. Hoffman, saw him on Monday morning, making the diagnosis of appendicitis. On Tuesday at noon the temperature reached 102 3-5, with distinct right iliac rigidity and tenderness. With laxatives, rest, enemata, and small doses of opium the symptoms subsided to temperature 99 to 100 pulse 84, tenderness diminished, and bowels very free. On Friday the pain slightly increased, the temperature reached 101, and the pulse 120. On Wednesday we counseled waiting; on Friday we recommended an operation. The abscess was large, the appendix friable, and a plastic exudate about the dark-colored intestines abundant. After removal of the appendix and sterilizing the cavity, I felt uncertain about the general peritoneum. It was opened by a left semilunar incision and the intestines in the pelvis were adherent and well coated by friable lymph. The index finger readily passed in to the abscess cavity from the peritoneal side. Whether the opening had existed in miniature, or whether I had caused the breach, I cannot positively say, yet intestinal infection was evident in the cavity. Irrigation through the abdomen, with free and deep pelvic packing, led to a recovery without event.

Class four, or general peritonitis, due either to early perforation, with extension of inflammation, before limiting adhesions have formed, or to multiple abscess formation, is one of the most unpromising conditions within the domain of our work. Unless these cases are seen within eighteen hours after inception they are practically hopeless. When the streptococcus is the prevailing germ the desquamating peritonitis is always fatal.

Evacuating the main abscess, neutralizing and sterilizing with hydrogen peroxide and large quantities of sterile solution, a search for additional pockets, counter-opening, and liberal through irrigation, with free gauze drainage, is all that should be undertaken.

Dr. M. M. Johnson's idea of covering the gauze wicks with gutta percha, to prevent adhesions of intestine and gauze, is highly practical. An improvement on this suggestion is the addition of fenestra along the sides of the drain to facilitate

Digitized by Google

capillary action. All agree that hot coffee enema immediately after the operation, with strychnia in good doses and a minimum of opium, add to the chances.

Vast credit is due to Drs. McBurney, Johnson, Morris, and Deaver for pioneer work in this line.

Dr. John B. Hamilton has sent his resignation to President Cleveland, and so he will remain in Chicago and retain his positions with the *Journal* and with Rush College. And thus ends the long and bitter fight which has been made against Dr. Hamilton, a fight, his friends say, caused in no small part from personal jealousies and political wire-pulling. The probability is that when his resignation is accepted Dr. Hamilton will make a statement of his side of the case which will show up some of the members of the Marine Hospital Service in anything but an enviable light.

Dr. Nansen's Divorce and Remarriage.—An extraordinary story is current in the European press to the effect that the Arctic explorer, Dr. Nansen, is about to be remarried to his wife, in consequence of the fact that prior to his departure on his last voyage in search of the North Pole he divorced her, in order to permit her to marry again in case of his disappearance or death, without going to the trouble of proving his decease. In order to understand this, it must be explained that in many countries in Europe great strictness prevails with regard to the remarriage of women whose husbands' deaths cannot be legally proved, absences of seven, ten, and even fifteen years being required by law to furnish satisfactory evidence that a missing spouse is no longer in the land of the living.

The Treatment of Lupus with Maragliano's Tubercle-Antitoxin Serum.—Terrill (*Gazetta Degli Ospedali*, July 12, 1896; *Therapeutische Wochenschrift*, August 9, 1896) has used this serum on two young subjects, one of whom had lupus of the foot and the other lupus of the hand. The first one received, in all, 107 cubic centimetres of the serum (at first one cubic centimetre every second day, then five cubic centimetres every third day); the second got twenty-five cubic centimetres (five every third day), and was also treated topically with the serum. In each case the result was very gratifying, although a perfect cure did not take place. The infiltration subsided and the joints became movable. The local application of the serum was founded on its direct destructive action on the bacillus, as was shown by the healing of a tuberculous anal fistula after local injections of it.

A perusal of articles illustrated will justify us in saying that the Review is worth the price of subscription. If you are not a subscriber, now is the accepted time.

Selected Article.

CLINICAL LECTURE ON MENINGOCELE AND ENCEPHALOCELE.*

By CHRISTOPHER HEATH,

PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND; HOLME PROFESSOR OF CLINICAL SURGERY IN UNIVERSITY COLLEGE, LONDON.

Gentlemen: The infant you have just seen me operate upon is an example of congenital malformation which is not very uncommon, and which you ought thoroughly to understand. The tumor at the back of the head was, as I showed you by puncturing it, distended with fluid, and formed an example of the commoner form of meningocele, or protrusion of the membranes of the brain. The child, a few weeks old, had only a small posterior meningocele, but, under my colleague, Mr. Barker, there is a child with a very much larger one, so large as to resemble a second head; and you may take my word for it that most cases of so-called "double-head" are cases of large meningocele. Besides the cases of meningocele, we have those of encephalocele, by which we mean a similar malformation, but with protrusion of part of the brain; and these cases are readily distinguished by the important fact that in the meningoceles there is no pulsation, and they are translucent, whereas in the encephaloceles there is always pulsation present, due to the protrusion of the brain into the tumor, and they are, of course, not translucent. What I have done to this child is simply to puncture the cyst, and to draw off some clear watery fluid, which is the cerebro-spinal fluid. This fluid is as nearly as possible pure water, containing only a little chloride of sodium, and, possibly, though not constantly, a trace of sugar. What I have done is simply to draw off a little of the water so as to relieve the tension, and then to paint the tumor with collodion; and by repeating this operation I hope to reduce the size of the swelling and eventually, possibly, to induce a cure. Let me warn you against taking any more active measures, because if an attempt is made to remove such a tumor it almost invariably ends disastrously and to the discredit of the surgeon.

I show you in Mr. Hutchinson's *Clinical Surgery* a plate giving several drawings of these posterior or occipital encephaloceles, and I also show you one plate of a very large posterior meningocele, of which the history is remarkable. In this case the communication with the cranium appeared to be closed, and only on the very earnest solicitation of the parents, Mr. Hutchinson ventured to remove the tumor, and with success. But cases of this kind are few and far between, and in infants, at all events where the communication is, as in our patient, perfectly obvious (because when the child coughs the tumor swells and becomes tense), to interfere with it would certainly lead to the child's death.

* Delivered at University College Hospital, March 9, 1896.

Digitized by Google

These cases are analogous to the deformity known as spina bifida. There is a want of development of the posterior part of the skull similar to the want of development of the arches of the vertebra in spina bifida; but there seems to be little doubt that the want of development depends not upon a simple arrest, but upon the fact that, very early in fetal life, hydrocephalus of the skull becomes developed. It is the pressure of the fluid within the brain and skull which prevents the due development of the occipital bone. But, be this as it may, the fact is undoubted that there is a hole in the median line of the occipital bone, through which the protrusion takes place. In the patient before you there can be no doubt of this, but in some of these children, where the opening in the skull is very near the foramen magnum, it becomes a difficult question to decide whether it is an instance of occipital meningocele or an example of spina bifida of the cervical vertebræ. But let me remind you that spina bifida of the upper vertebræ is extremely rare, it being most common in the lumbo-sacral region; therefore, if you meet with a case in which any doubt exists as to whether it is a spina bifida of the cervical region or an occipital meningocele, the chances are much in favor of its being an occipital meningocele.

Fig. 1.

Encephalocele of the posterior part of the skull is less common than simple meningocele. Mr. Power recorded in 1856 a case of the kind, in which the occipital region presented a soft tumor equal in size to a very large orange. The deformity had obstructed the labor, and forceps were employed for the extraction of the head, the child surviving nearly twenty-four hours. On dividing the integuments in the middle line over the tumor, they were found to blend with the dura mater, the vertical plate of the occipital bone being entirely deficient, or replaced only by connective tissue. The arachnoid was well defined, and the vessels of the pia mater were extraordinarily numerous, large, and fully injected with blood. More than half the cerebral mass, comprising the whole of the posterior and part of the middle lobes of the hemisphere of the cerebrum, was contained in the tumor. The consistence of the brain was somewhat soft, but the distinction between white and gray substance was evidently perfect.

The occipital encephalocele is by far the commonest of the varieties which are met with, but the most important, surgically, are those of the anterior part of the head, and particularly at the root of the nose.

In 1856 I brought before the Pathological Society of London four examples of encephalocele in the anterior part of the skull. In the first case (Fig. 1) the tumor was of large size, involving the orbit and forehead. The right half of the frontal bone, the whole of the parietal and portions of the temporal bone were wanting, and no traces of the eyeball existed. The tumor was composed of softened brain substance, and was supported by the squamous portion of the temporal bone, which was pushed forwards and outwards, at right angles to the malar bone. Over the cribriform portion of the ethmoid was a large cyst, filled with yellow transparent fluid. There was a hare-lip and cleft palate. The child lived four days.

In the second case (Fig. 2) the child was born, at full term, with a large tumor in the forehead, cumference transversely, and ten inches in circumference from before backwards. This tumor was the presenting part, and simulated the breech very closely. The medical man punctured it and a teacupful of bloody fluid escaped; a deeper puncture measuring, when distended, twelve inches in cir- gave exit to about a quart of clear serous fluid, upon which the tumor collapsed in great part and the delivery was effected. The child lived ten hours, fluid and particles of brain matter coming away from the puncture during that time.

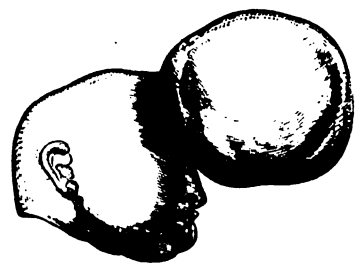


Fig. 2.

The third case was in a girl aged eleven, who at birth had a pulsating tumor at the root of the nose, evidently dependent upon some communication with the interior of the skull, and probably connected with the anterior lobes of the brain (Fig. 3). I first saw her when she was five years old, and there was no material alteration at the later date. The tumor had expanded the nasal bones, and was presumed to depend upon some want of development of the base of the anterior fossa of the cranium, and probably of the cribriform plate of the ethmoid. This child had been taken soon after birth to an eminent surgeon to be operated upon for a supposed vascular tumor at the root of the nose, and was, I believe, the original of the figure which I show you in one of Mr.

Digitized by Google

Hutchinson's plates. I regret to state that this girl came to an untimely end in the year 1868, having come under the notice of a surgeon who did not recognize the nature of the case. He cut into the tumor with a fatal result.

Fig. 3.

The fourth case was in a boy of three years, and the protrusion was almost precisely similar to that in the last case as to position; but the tumor was more prominent, and about the size of a large marble (Fig. 4). During the first four months of life the sac appeared to be nearly transparent, and at the end of that time Sir James Paget, under whose care the child then was, tapped it and

Fig. 4.

evacuated a considerable quantity of fluid. Afterwards iodine injections were used on three occasions, and caused so much inflammation that serious consequences were apprehended; after this, however, the walls gave way, and a large quantity of fluid, looking like dirty water, was evacuated. Within twenty minutes the tumor refilled, and since that time nothing has been done.

These cases of anterior encephalocele have many features in common. There is a protrusion at the root of the nose, which generally pulsates. I show you here two drawings which might be taken from the same patient, and of one of these I can give you a history. The child, when an infant, was shown by the late Mr. Shaw at the Pathological Society in the year 1857. He was alive, and came before the court of examiners at the College of Surgeons in 1883, and again in 1888. A very good idea of the deformity common to these cases is given by Fig. 5, which is taken from a photograph of a young man who was in this hospital, under the late Mr. Berkeley Hill's care, a few years back. The unsightly projection in the region of the nose, giving an appearance somewhat resembling a double nose, is very characteristic of the affection.

Mr. Hutchinson reports one of the few instances on record of a dissection of this malformation. The case occurred under the late Mr. Bracey, of Birmingham; the child was a boy, aged two and a half, healthy and intelligent. The child's appearance was so hideous that its friends were very

Fig. 5.

anxious that something should be done, and Mr. Bracey, thus urged, placed a silver wire round the neck of the tumor; meningitis resulted, and the child died. The larger portion of the tumor consisted of a protrusion of the anterior lobes of the brain, covered by the membranes and the integuments, which were natural in appearance. The smaller portion of the tumor was formed of a sac of membrane, apparently dura mater, crossed by bands of areolar tissue and filled with subarachnoid fluid. This, too, was covered with skin, which was here thin and rather bluish. This portion could be nearly emptied by firm and continuous pressure. The pulsations could be felt and seen in the larger tumor; the whole increased in size with the child's crying. The macerated portion of the skull showed a large hole involving the frontal, ethmoid, and nasal bones, and the hole, which had everted lips, was big enough to admit two thumbs.

In the case of anterior encephalocele, still more than in the cases of simple posterior meningocele, any surgical interference is to be deprecated. It is hardly possible, I think, that any good can result from an operation; and, as you have seen, in the cases where it has been attempted death has invariably resulted.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$2 00
Single copies..... 20

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, OCTOBER 15, 1896.

THIS issue has been delayed on account of cuts not being received in time.

TYPHOID FEVER.

To meet the demands of consistency our theories have to be constantly readjusted to great scientific discoveries. Our knowledge of typhoid fever, in common with our knowledge of much else in medicine, is in a transitional state. However, there seems to be a consensus of opinion among doctors that there is a pathogenic typhoid germ, and that it may enter the body either (*a*) by the air, (*b*) by food, or (*c*) by water. In advocacy of the first mode of contracting the disease the REVIEW is not enthusiastic. But we have known of an epidemic of typhoid fever caused by eating garden vegetables that had been irrigated by sewer water. However, almost all who have studied the etiology of this disease are agreed that drinking water is the chief agent in introducing the germs into the alimentary canal.

But there are factors other than those of causation, for now comes Bernheim, maintaining that the classic type of typhoid, with a period of augmentation of three or four days, stationary period twelve to fourteen days, and period of decline five or six days, instead of being constant, is not even the most common. The greatest deviation from this schema is, of course, to be met with in the stationary period, which is sometimes shorter and very often longer. When the period is shorter it is the result of the bowel having gotten rid of the typhoid germ before the intestinal glands had gone on to ulceration. Without this destructive lesion recovery is greatly hastened. Those cases in which the second period is prolonged, the continuance is not due to a single evolution of the germ, but to the evolution of successive colonies. An autopsy will sometimes show all of the following morbid conditions: (*a*) Glands that have ulcerated and have healed, (*b*) glands in a state of ulceration, and (*c*) others with the hyperemia that precedes ulceration. Relapses are caused by a second evolution of the typhoid germ, and may occur during the waning period or after convalescence has well advanced. Unusually prolonged cases are due to successive evolutions of the germ. Vigorous and persistent antiseptic treatment modifies not only this phase of the disease, but the temperature, the pulse, the lips, the tongue, and the abdominal features are so changed that Jenner himself would scarcely recognize the clinical picture. That the typhoid germ may enter many tissues of the body besides the intestinal glands, where the toxin-producing process may be continued, is altogether probable. But that the contents of the small intestine, and especially the lower portion of the ilium, furnishes the best culture medium may be regarded as well established. It should be borne in mind that it is the ptomains of the germ, and not the germ itself, which furnish the chief menace to the patient. It must have occurred to many others besides the REVIEW that the production of these ptomains by great numbers of the germ furnishes the chief objection to a starchy diet, as it favors, both in quality and quantity, a culture medium best fitted for the multiplication of the typhoid germ—the richest culture field. On the other hand, a liquid, albuminous diet, digested in the stomach, leaves but little residuum for a culture medium—furnishes the poorest culture field.

Granting the phenomena accompanying typhoid fever to result from the absorption of ptomains from the small intestine, the rational treatment would be, here as in surgery, to clean out the depot of infection. This may be done by the aid of water and germicides directed at this portion of the alimentary canal, aided, if necessary, by cathartics, or else such germicides should be selected as possess cathartic properties. Keep the bowel as clean as the face, not only of germs, but also of a culture medium. For this do not depend upon flushing by rectal injections.

THE DISCOVERY OF ANESTHESIA.

On the 16th of October, 1846, the first surgical operation ever done under an anesthetic was performed by Dr. Warren, who removed a venous tumor from the jaw of a man at the Massachusetts General Hospital, Dr. W. T. G. Morton, a dentist, administering the ether. That the fiftieth anniversary of this notable event should be cele-

Digitized by Google

brated in a fitting manner is certainly commendable, and the gentlemen connected with the hospital in which anesthesia was first used propose to commemorate that occurrence on the 16th of this month. At that time papers referring to the event will be read, the following being the program: Dr. R. T. Davis, of Fall River, Mass., and Dr. Washington Ayer, of San Francisco, will read papers on "Reminiscences of 1846;" Dr. John Ashurst, Jr., of Philadelphia, on "Surgery Before Anesthesia;" Dr. David W. Cheever, of Boston, on "What Anesthesia Has Done for Surgery;" Dr. John P. Reynolds, on "The Relation of Anesthesia and Obstetrics;" Dr. Wm. H. Welch, of Baltimore, on "The Influence of Anesthesia Upon Medical Science;" Dr. Charles McBurney, of New York, on "The Surgery of the Future;" and Dr. S. Weir Mitchell, of Philadelphia, will read a poem, "The Birth and Death of Pain." Neither the beautiful card of invitation, gotten up according to the art of the printer of fifty years ago, which has been sent out, nor any of the titles of the papers to be read contain one word to indicate to whom the honor of the discovery belongs, and to whom praise will be meted out at that meeting. And it is well that it is so. When the men who were living at the time hesitated to say who deserved to wear the laurel wreath, it is too late now to award the prize. In the Review of last month mention was made of an article in *McClure's Magazine*, by the widow of Dr. W. T. G. Morton, on the discovery of ether as an anesthetic, and giving, of course, all the honor to her husband. The *National Magazine* for this month contains a paper entitled "Dr. Jackson's Discovery of Ether," by William Barber. In this paper strong and conclusive arguments are presented to prove that Dr. Jackson was the discoverer, and that he should have the honor. That each deserves praise and honor for what they did all will admit, but that all the honor belongs to either, or both, is very doubtful. We must go back farther than 1846 if we are to find out the true history of the great discovery. For the application of the fumes of sulphuric ether for anesthetic purposes was merely a growth, a development, from the application of nitrous oxide gas for the same purpose.

The beginning took place in the great epoch from 1720 to 1820. In this epoch the great discoveries of Hales, Black, Cavendish, Priestley, Davy, Bergman, Scheele, Lavoisier, and Berthollet took place. During this period a flood of light was thrown on the nature and properties of various gases. But of these none was greater than the discovery by Priestley of nitrous oxide gas. By these discoveries a new theory of therapeutics was established, and "pneumatic medicine" was to cure all diseases. At Clifton, near Bristol, England, a "Medical Pneumatic Institute" was established in 1798, and the celebrated Humphry Davy was made the superintendent. In this institute he found and revealed the properties of the gas which Priestley discovered, and from one of its properties it received the name of "laughing gas." At the beginning of this century Davy published a work, "Researches on Nitrous Oxide Gas," and in this book, page 556, he said: "As nitrous oxide in its extensive operation appears capable of destroying physical pain, it may probably be used with advantage during surgical operations." And yet, strange as it may seem, nearly forty years elapsed before this truth was demonstrated. It remained for three or four American dentists and physicians to demonstrate the truth of Sir Humphry Davy's dictum.

In December, 1844, a well-known popular lecturer of that time delivered a lecture in Hartford, Connecticut, on nitrous oxide and other gases, and experimented with the former on some of the audience. Dr. Horace Wells, a dentist of Hartford, was present and noticed that one of the persons, under its influence, fell on a chair and injured his leg, but did not suffer any pain till the influence of the gas wore off. The next day Dr. Wells got the lecturer to give him some of the gas, and had a molar tooth extracted without pain. Most probably the modern method of producing anesthesia dates from this operation. Dr. Wells gave the gas to several persons and was so elated with his success that he obtained permission to administer it in the Boston Hospital. But the bag burst, or was taken away too soon—both reasons are given—and the patient uttered a scream when the tooth was extracted. Jeers and hisses greeted the operator, and he went away mortified and discouraged. Three years after, when Drs. Jackson and Morton were each claiming the honor of discovering anesthetics, he published a pamphlet in which he gave a history of his experiments with the gas, and claimed the honor for himself. In 1848 Dr. Wells committed suicide, his friends claim, from worry at the way he had been treated in the controversy.

Among those present at the experiment of Dr. Wells at the Boston Hospital were Dr. Morton, a former pupil and partner, and Dr. Jackson, pro-

Digitized by Google

fessor of chemistry. Some time after this Dr. Morton went to Hartford and asked Dr. Wells for some of the gas to use in dentistry, and the latter advised him to get it of Dr. Jackson, of his own town. On Morton's applying to Jackson for the nitrous oxide gas, Jackson told him to use sulphuric ether and explained its properties to him. According to the article in the *National Magazine* referred to, Dr. Jackson's own account of his discovery is as follows: "In the winter of 1841 and 1842, while delivering a lecture in Boston, he accidentally broke a jar of chlorine gas, the fumes of which nearly suffocated him. He at once inhaled sulphuric ether and was thereby much relieved. But the next morning his throat was again very painful and his lungs much oppressed. Again he had recourse to sulphuric ether. He sat down, soaked a towel in ether, and placed it over his mouth and nose, so as to allow him to inhale the vapor mixed with air. Under its operation he gradually became insensible to pain, and then unconscious for a space, as he infers, of about a quarter of an hour. As consciousness gradually returned the sensation of pain in the throat returned with it. From this he reasoned that sulphuric ether could be safely used as an anesthetic. Morton used it with success for extraction of teeth, and afterwards administered it for that surgical operation in the Massachusetts General Hospital, which event is to be commemorated on the 16th of this month.

This, in brief, is the history obtained from the claims and counter-claims of the three men who claim the honor of discovering anesthesia. While the honor of first using ether in surgical operations undoubtedly belongs to Morton, it is equally true that he knew nothing of this substance till Jackson told him of it. And while honor belongs to Jackson for this discovery, yet it is known that sulphuric ether had been inhaled in this country and in Europe before as an excitant. In 1818 Faraday had shown that the effects of inhaling its fumes were similar to that of inhaling nitrous oxide gas, and it was customary to illustrate this by experiments before chemical classes in colleges. The great wonder is that no one, during the forty years from Sir Humphry Davy to Wells and Morton should have found out that great blessing to humanity whose discovery has revolutionized surgery and human existence.

Don't you think that a dollar invested in a year's subscription to the Western Medical Review will pay you?

ILLINOIS STATE BOARD OF HEALTH AND MEDICAL EDUCATION.

Under the proceedings of the Nebraska State Board of Health will be found a report of the investigation made by that board of a case where the applicant for a certificate to practice made an affidavit that he was a graduate of the National Medical College and Hospital of Chicago. He had no diploma, claiming that it was granted but held for fees. The board never having passed on the standing of this college, made inquiries as to its standing, and facts were brought out that the applicant had attended another school, had failed to pass, had gone to the National Medical College, and in two weeks was graduated. The board therefore refused to recognize the school and the application for a certificate was rejected.

The first thing the board did was to ascertain whether the school was recognized by the State Board of Health of Illinois, it naturally being supposed that that board ought to know the standing of schools in its own state. Inquiry showed that the Illinois board did recognize the school, and had the Nebraska board not found out the facts referred to it would naturally have supposed the school was straight and would have recognized it as being in good standing. It showed on its face that it was; its catalogue and announcements made it appear that it had the full time required and everything that is supposed to be necessary to put a school "in good standing."

That the Illinois board is not what it was in the days of Dr. John H. Rauch is becoming more and more evident. This is not the only school in Chicago that the board recognizes as being in good standing, when evidently they are far from coming up to even a low standard. In the *New York Medical Journal* of August 25th, Dr. Julius Grinker exposes one of these, the "Harvey." After commenting on a paper published in the *Journal* by Dr. Morton, of St. Joseph, on medical education, he showed up the sorry state of affairs which existed in Chicago and Illinois, as follows:

"Allow me to state that upon careful investigation he will find in the city of Chicago, besides the three regular medical schools that maintain a high standard, a number of inferior evening colleges of medicine, the purpose of their existence being to defeat the spirit of the medical practice act, though they profess to comply with the letter of the law.

"These evening colleges of medicine grant diplomas after an attendance varying from six months to four years, which the State Board of

Digitized by Google

Health recognize. Upon the payment of $5 and the presentation of such a diploma, the State Board of Health of Illinois grants applicants a license to practice medicine and surgery in the state of Illinois."

After eulogizing the Illinois State Board of Health as it used to be, he says:

"It is this very same state board of health—but now with another secretary—that enables colleges like the Harvey and Harvard night schools of medicine to do a thriving business by inducing young and middle-aged men and women to leave the workshop and the stock-yards, where they slaughter cattle, for the more remunerative occupation of slaughtering mankind."

Speaking of the Harvey Medical College, Dr. Grinker says:

"This school, as well as others of the same character in the city of Chicago, allows its students to work all day at their respective occupations, and exacts of them an attendance upon lectures three hours evenings, namely, from 7 to 10 P. M., although excuses of three months' absences are accepted.

"As for clinics, they receive mention in the *Catalogue*, and students graduate without ever having seen a single capital operation at the college, there being no hospital connected with it, and but few dispensary clinics.

"The facilities of the school are of the most limited kind. It is located on a floor and a half of an office building, where there are a dentist, a private dispensary of an advertising doctor, and a good-luck store. One can form an idea of what kind of material they can get up there for the benefit of evening students."

Dr. J. W. Scott, the secretary of the State Board of Health of Illinois, answers Dr. Grinker in the *Journal* of August 15th, and accuses him of having been connected with the school himself, and in reply to this Dr. Grinker says (*Journal*, August 29th):

"The history of my connection with Harvey is as follows: After having read in the papers that the Illinois State Board of Health had decided to recognize the Harvey School of Medicine, I allowed my name to be used in connection with a professorship. I was invited to the college, and the secretary offered me the chair of pathology, which I accepted. Previous to my acceptance I had several conversations with the secretary in regard to the scope of the institution, its work, and its ultimate future, from all of which I gathered the remarkable admission that this school was only intended to be a preparatory school, a so-called 'feeder' for the day schools of medicine, and that it was expected that some day one of the regular day schools would buy up the night school and amalgamate with it. She assured me on a later occasion that her senior class was virtually useless, that none of the members of the class had a right to graduate, and it was not intended that they should. I then reasoned: Are there not reputable physicians teaching popular physiology and chemistry in the New York evening high schools, and why should I not connect myself with a preparatory school of medicine?

"And here comes the most interesting part: As long as I was only teaching pathology to juniors I had no idea of the mental caliber of the seniors, who never were juniors in this institution, and some not in any; but when my colleague, the regular professor of practice of medicine, temporarily discontinued his course of lectures, I had ample opportunities in my quizzes and lectures before seniors to form a correct estimate of the composition of the class.

"Imagine my surprise when at the end of the term I received a note to come down to the office and sign diplomas! About the same time I was informed that students would graduate as full-fledged doctors, and eight diplomas were presented to me for my signature as the professor of pathology. I asked for credentials which would show that those eight seniors had passed in my branch with some reputable teacher, but was told that the directory was well satisfied that the students had passed in pathology somewhere. I then stated that I should not attach my signature to any of those diplomas until I had satisfied myself that the holders of them had passed in my branch. The secretary then told me that students might produce credentials if they saw fit to do so, but that they would graduate anyhow; furthermore, that such a request on my part was unheard of, and I was the only one of the faculty asking for credentials.

"It was at this time that I discovered a diploma mill, and I hastened to resign my professorship immediately, and who would not?

* * * * * * *

"On the evening of the same day I met Dr. Scott, and asked for an investigation of Harvey Medical College.

"Never was I more surprised than when Dr. Scott, whom I saw for the first time, answered all my objections in almost the same words that the secretary of the college had made use of the previous day. He knew by heart the name of every graduate of Harvey College, and was armed with an array of arguments that were simply astounding."

And Dr. Grinker goes on and shows that Dr. Scott knew too much about the Harvey Medical School not to be intimately connected with it. Proceeding, he tells of the fight he and others made before the board to have the school declared not in good standing; how Dr. Scott, the secretary of the board, fought them at every step, and how he finally gave up in disgust.

Digitized by Google

It is interesting, but not pleasant reading when one remembers what the state board of Illinois used to be. What has become of the spirit that used to animate it? What has become of the spirit and courage of Dr. Rauch? There was a time when the Illinois board was a beacon light for those who were striving to elevate the standard of the medical profession of the country. It gave courage and hope to those who were anxious to raise the standard of medical education in the United States so that the title of "American doctor" should cease to be a reproach, but rather an honor, before the people of the world. There was a time when if the Illinois board recognized a school, it was recognized over the country. There are eighteen medical colleges in Chicago, exclusive of the post-graduate schools, and of these seven ought to be recognized, and no more. There is not one of the others that comes up to even a fair standard. And yet what can the Nebraska and other boards of health do if these schools show up the required three years' course and clinical instruction? Nothing. With our present law they must recognize them, unless evidence outside can be procured that will give a good reason for refusal.

Notes and News.

Dr. W. G. Estee has removed from Elyria, Nebraska, to Farnum, Nebraska.

Dr. Paul E. Von Koerber is about to remove from Loup City, Nebraska, to the City of Mexico.

Weir's Index to the Medical Press has suspended publication on account of lack of support.

Professor Pinaud, of Paris, has succeeded in skiagraphing the pregnant uterus, with its contents, in a cadaver.

Dr. C. C. Booth, of Youngstown, Ohio, has invented a motor for horseless carriages, which is said to be a success.

The French government requires all imported cattle to be tested with tuberculin unless they are to be slaughtered immediately.

A monument to Pasteur is to be erected in Munich, and a committee has been appointed to solicit subscriptions for this object.

Think of the fact that of the 3,000 physicians in New York, 2,400 are foreigners and only 600 Americans.

That the free and unlimited coinage of silver at the ratio of 16 to 1 would be a good thing is a theory. That the Western Medical Review is a good thing and worth patronizing is a fact.

By a new law of Ohio, all executions must hereafter be by electricity. The place of execution must be in the enclosure in the penitentiary, and by the warden or deputy.

Attorney General Carr recently decided that the State Medical Board of Colorado has no right to revoke a license to practice except after conviction of some penal offense.

It is said that quackery is at such a premium in Paris that the qualified men hide their certificates and diplomas, and pretend to be unqualified, for the sake of getting business.

Dr. N. S. Davis, Jr., has assumed the position of secretary of the Chicago Medical College—medical department of the Northwestern University—in place of Dr. Frank Billings, resigned.

Prof. Nicholas Senn, president of the American Medical Association, tendered a dinner in honor of Prof. William Macewan, of Glasgow, September 28th, at the Athletic Club rooms, Chicago.

Prof. Edwin Klebs, M. D., threatens to prosecute the Harvard Medical College and Hospital of Chicago for printing his name as one of the members of the faculty, unless the catalogue is suppressed.

More medical men have been nominated for the legislature this year in Nebraska than ever before. Next month we shall give the names of the lucky ones who win, and we hope that that will include all who are nominated.

The Ohio State Board of Registration and Examination have refused to recognize diplomas issued by the Hygeia Medical College, of Cincinnati. Considerable pressure was brought to bear on the board, but in vain.

According to the *Journal of the American Medical Association*, its editor, Dr. John B. Hamilton, is confined to his room with an attack of acute bronchitis since September 25. His friends hope that he will be out in a few days.

Dr. H. B. Lowry, of Lincoln, was elected president of the Medical Society of the Missouri Valley at its meeting in Council Bluffs last week. Considering that the doctor was not "in line," the honor conferred is appreciated by his friends.

St. Louis has two hospitals owned by stock companies, run for the money there is supposed to be in it. People are asked to become members and pay 50 cents per week, for which they will be entitled to enter the hospital in case of sickness.

Dr. E. H. Pratt, of Chicago, the little god of the orificial surgeons, has been sued by a lady upon whom he did the "American operation" for epilepsy. She claims that she will never recover from the operation. Twenty-five thousand dollars damages are asked for.

Digitized by Google

DR. A. C. BERNAYS, of St. Louis, and the Antikamnia Chemical Company have been sued by Anita May George, upon whom Dr. Bernays operated for stricture of the esophagus. Anita wants $60,000 because the defendants published her picture, before and after operation, with a history of her case, in a pamphlet advertising Antikamnia.

ACCORDING to the *Standard*, another medical college has just been incorporated in Chicago. It is called the Metropolitan Medical College of Chicago. The incorporators are C. W. Olson, Lewis N. Curott, and Ed F. Millard. We believe this will make nineteen medical colleges in Chicago now, but it is impossible to keep track of them without a tally sheet.

THE rates from Omaha to the City of Mexico and return, for the Pan-American Medical Congress, will be $63 by way of New Orleans, and $57 by way of Ft. Worth, El Paso, etc. Those going by way of New Orleans will have a special train through to the City of Mexico from New Orleans. A great time is anticipated. Those expecting to go should write to Dr. D. C. Bryant, Omaha, at once.

THE Wisconsin Eclectic Medical College, once of Milwaukee, but now of Chicago, offers diplomas to Canadians for $10, because they are not recognized in Canada, so the circular says. They are, however, "good, lawful, and valid in Wisconsin, Kansas, Idaho, Wyoming, Michigan, and Indiana." One of these diplomas was presented to the Nebraska State Board of Health this month, but they cruelly refused to recognize it.

DR. JOHN B. HAMILTON, editor of the *Journal of the American Medical Association*, formerly surgeon general of the Marine Hospital Service, and now a surgeon in that service, has been ordered to San Francisco. Application for reversal of this order has been made to the highest authorities, but without avail. It remains to be seen whether Dr. Hamilton will resign or obey the order, but for the sake of the *Journal* we hope he will do the former. Personal jealousy is probably at the bottom of the removal.

THE new order of things in medical education in Missouri seems to have been accepted and started with but little friction. State superintendent of schools Prof. John R. Kirk appointed Prof. Q. R. Morgan, of St. Louis, to take charge of the examinations in St. Louis, where eight different dates were given. Principal John T. Buchanan, of Kansas City, had charge of the examinations there, and the same dates were occupied as at St. Louis. Principal C. E. Miller conducted the examination at St. Joe, where four different days were devoted to the work. This is a long step in advance, and old Missouri will soon be referred to as one of the advanced states in medical legislation.

DR. HOWARD A. KELLEY writes to the *American Journal of Obstetrics* for September of two cases as curiosities of obstetrical procedure that are worth repeating, if only to show how much we have not yet learned. Dr. Kelley says that during a visit to Rockingham county, Virginia, Dr. G. W. Richards described a delivery which he had effected in the following manner eight years ago: The patient was a primipara, about thirty years old, who had a slow labor and weak pains. The head was well engaged, but did not advance, and, as the doctor did not have his obstetric instruments with him and saw no other means of securing good traction, he immediately cut a bridle of tissue, an inch wide and two inches long, through the scalp on the most accessible part of the child's head, near the posterior fontanelle, and, hooking his fingers through this, pulled until it broke. A piece of tissue larger than a dollar was pulled off. Delivery was effected, however, but the wound suppurated, and the child is living, with a small scar in the scalp as big as the end of a finger. The other case reported is from "The Now and Then of Medicine, A Post-Prandial Discourse," by the late Dr. Edward R. Mayer. Dr. Mayer writes: "Then there were other pure and capable men who did the best they could with their lights, enjoyed the confidence of the community, and had large followings. One of the most esteemed and successful of these once, with modest triumph, let me into a secret of his success in obstetric procedure. He attributed this to a method of his own discovery, which he considered worthy of publication, but had not yet mustered courage to place in print. This was that of incising the fetal scalp with scissors, inserting the index finger between it and the calvarium, and thus forcibly extracting it. It is needless to say that this really good man had never owned or seen a forceps. I do not remember having seen his method referred to in print, but I have lately seen the cicatrices left by him upon the now bald heads of some of his victims."

Society Proceedings.

SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.—The ninth annual meeting of the association will be held in Nashville, Tenn., Tuesday, Wednesday, and Thursday, November 10th, 11th, and 12th, 1896. The Nicholson House has been selected as headquarters for the association. The rates will range from $2 to $4 per day. Arrangements have been made with the Southern Passenger Association for reduced rates on the certificate plan. These certificates, properly signed, will entitle those who attend to a return ticket at the rate of one-third of one full fare. Those who contemplate attending the Pan-American Medical Congress, to be held in the City of Mexico, November 16-19, will have time to do so after the meeting of the Southern Surgical and

Digitized by Google

Gynecological Association. A rate of one fare for the round trip has been made on account of the congress, stop-over privileges being allowed holders of tickets therefor.

Section on Obstetrics and Diseases of Women.—Milo B. Ward, chairman, Topeka, Kan.; George H. Noble, secretary, Atlanta, Ga.; executive committee, Joseph Eastman, Indianapolis, Ind.; F. H. Martin, Chicago, Ill.; J. T. Johnston, Washington, D. C.

As an effort has been made to keep a mailing list of the members of the American Medical Association interested in the section on obstetrics and diseases of women, please be kind enough to publish a notice to the effect that all members desiring to participate in the proceedings or to attend the meetings of this section should send their names and addresses to the undersigned, as no communication concerning papers, program, etc., can be had with members not upon the proposed list.

Most respectfully, Geo. H. Noble,
Secretary.

No. 186 S. Pryor St. Atlanta, Ga.
Other medical journals please copy.

The Medical Society of the Missouri Valley met in Council Bluffs, Thursday, September 17, 1896. While there was a good attendance, it was not as large as it would have been had the time of meeting not conflicted with the meeting of the Mississippi Valley Medical Association at Minneapolis. As it was, several of the old war horses of the society were at the larger meeting in the north. Among those present were Drs. F. S. Thomas, A. H. Carter, J. H. Cleaver, Donald Macrae, Sr., Donald Macrae, Jr., J. C. Robertson, H. B. Jennings, J. C. Waterman, M. C. Christensen, F. W. Dean, V. Stephenson, V. L. Treynor, T. B. Lacey, Council Bluffs; H. B. Lowry, A. D. Wilkinson, Geo. H. Simmons, Lincoln, Neb.; J. P. Lord, Chas. Rosewater, B. F. Crummer, R. C. Moore, Victor Coffman, D. C. Bryant, W. F. Milroy, A. W. Edmiston, R. M. Stone, H. L. Burrell, Carl G. Swensen, W. O. Bridges, A. F. Jonas, A. A. Parker, B. B. Davis, Ewing Brown, Omaha; James F. Taylor, Salix, Iowa; H. S. Rogers, F. M. Miller, W. B. Lawrence, Rebecca Hanna, Red Oak, Iowa; George Coit, Missouri Valley, Iowa; R. R. Williams, Manning, Iowa; Frank Porterfield, Atlantic, Iowa; L. L. Bond, West Side, Iowa; J. M. Emmert, Atlantic, Iowa; E. S. Smith, Harlan, Iowa; A. Jolly, Hamburg, Iowa; James Besgard, Harlan, Iowa; W. R. Koob, Brayton, Iowa; J. W. Kime, Des Moines; I. U. Parsons, Malvern, Iowa.

The following new members were elected: Drs. Frank W. Miller, Red Oak, Iowa; Arnold Jolly, Hamburg, Iowa; Carl T. Swensen, Omaha; Herman Anderson, Council Bluffs; A. Victor Stephenson, Council Bluffs, and George Nusum, Honey Creek, Iowa.

Dr. D. C. Bryant, of Omaha, read a very interesting paper on "The Treatment of Burns of the Conjunctiva," which was discussed by Dr. Gifford, of Omaha.

Dr. F. W. Dean gave a very interesting account of a case of chronic pharyngitis simulating a tumor.

Dr. C. C. Allison read a paper on "Operative Technique in Appendicitis." (See page 152.) Discussing this paper, Dr. Macrae, Jr., said he did not believe that the trouble is caused by microbes, but by fecal concretion. Dr. Jennings said he believed it was a monstrous mistake to give opium in these cases, and thus mask the most important symptoms, which should be watched. If pain keeps up twenty-four hours, he believed, the case is surgical. Dr. Allison, in closing, said he did not believe in large doses of opium, but he did believe that when pain is severe a little would do no possible harm, and certainly did good in relieving the severity of the pain.

Dr. J. M. Barstow, of Council Bluffs, read a paper on subinvolution, reporting a case, the principal treatment being massage. Dr. Macrae, Sr., in discussing the paper, said that the more he saw of massage and the more he used it, the more he was impressed with its practical usefulness.

Dr. J. W. Kime read two papers, the first being "Skin Grafting, a New Method," the new method being by blistering. The second paper was in reference to the new craze of Osteopathy. Both papers brought out animated discussions.

Dr. A. D. Wilkinson read his paper on "Breech Presentations." (See page 141.) Dr. Moore, of Omaha, said that next to face presentations, those of the breech give most trouble, and especially if one becomes agitated. Coolness and being ready for action are two qualities of which the accoucheur must be possessed at this time. He believes the bag of waters should be kept intact to aid thorough dilatation. Most cases, if thorough dilatation has taken place, will end easily. If pelvis is small, bring down a foot and convert into a footling. Make traction only during a pain. When the body is born, it requires action, haste. The cord is pressed upon by two bony substances, the fetal head and the pelvis. Forceps must be ready and they can be applied easy, much easier than one would think who had never applied them. Dr. Rosewater believed that the position should be rectified before labor has progressed far by combined manipulation. Version can often be accomplished even when labor has advanced some, if the waters have not broken. Does not believe, with Dr. Moore, that it is a good plan to bring down a foot and change presentation. Dr. R. Hanna, of Red Oak, Iowa, said in her twenty-three years' practice she had had but one breech presentation, and had no trouble with that.

"Treatment of Hydro-Thorax and Empyema," was the title of the paper read by Dr. J. M. Emmert, of Atlantic. In the discussion of this paper

Digitized by Google

Dr. Crummer, of Omaha, said he was a great believer in having a good opening made, and therefore was in favor of resection of ribs. They get along better and one can pass one's fingers and tell better the conditions. Dr. Kime believes the method of injection of iodoform emulsion is being done away with. Dr. Macrae, Sr., spoke of the new method of filling up the cavity with one-half as much saline solution as there was matter removed. He had not tried it, but would do so in the next case. It is claimed that the solution is absorbed, but Dr. Jennings disputed this point, believing that the law of osmosis is opposed to such a probability. Dr. Milroy, of Omaha, said that the author of the paper says nothing of medical treatment, but he himself believed in it. He was not in favor of hydragogue cathartics, but he did believe in building up the constitution. Dr. Moore believed in the old rule that whenever and wherever there is pus, go for it. It is a very depleting disease, and patients should be gotten out as soon as possible. He had strapped a bottle to the side of his patients to receive the discharges, and got them out in that way.

Dr. B. B. Davis, of Omaha, read his paper entitled "Congenital Dislocation of the Hip." Dr. R. Hanna, of Red Oak, Iowa, read her paper on "A Plea for More Conservative Medicine and Surgery." These papers will be published in the next number of the WESTERN MEDICAL REVIEW.

Dr. R. M. Stone, of Omaha, read a paper on "An Instructive Case of Labial Cyst." Dr. J. P. Lord a paper on "Meningocele, with Report of a Case," published in this number (page 143). Dr. V. S. Treynor, a paper on "A Case of Gunshot Wound of the Rectum." The last paper was by Dr. M. C. Christensen, on "Typhoid Fever." There being two hours to spare before the banquet, this favorite subject of discussion was taken up, and nearly everybody had something to say on it.

The following officers were elected: President, Dr. H. B. Lowry, Lincoln, Neb.; first vice president, Dr. Rebecca Hanna, Red Oak, Iowa; second vice president, Dr. R. R. Williams, Manning, Iowa; treasurer, Dr. T. B. Lacey, Council Bluffs, Iowa; secretary, Dr. Donald Macrae, Jr., Council Bluffs, Iowa.

The next meeting will be held in Lincoln, in March. The usual banquet was held, after the adjournment of the meeting, at the Grand Hotel.

THE OVARY.—Absent in body, but present in spirit.

EPITHELIUM IN URINE.—Under the microscope this is seen as irregularly shaped bodies.

THE intrauterine application of turpentine on cotton is of service in post-partum hemorrhage.

WE may not be good judges, but we think the WESTERN MEDICAL REVIEW is about as good a medical journal as any published. We are after your subscription.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Twenty-second Annual Meeting, Held at the Minnesota State Capitol, St. Paul, September 15, 16, 17, and 18, 1896.

The association convened in the senate chamber at the capitol. Dr. C. A. Wheaton, chairman committee of arrangements, called the meeting to order. Most Rev. John Ireland, D. D., offered prayer. On behalf of the state of Minnesota, Governor D. M. Clough gave an address of welcome. The physicians were welcomed on behalf of the city by Mayor F. B. Doran. He referred to the city's reputation as a host, won by the magnificent record of the recent encampment, and said that upon that occasion St. Paul had welcomed the men who had preserved the nation, and now was happy to welcome the men who preserved the bodies of the nation's defenders. Dr. A. J. Stone spoke for the profession in St. Paul in extending a welcome to the visitors. "We owe much of our delight in anticipating your visit here to the ladies, and we want you all to place your wives, mothers, and daughters in the hands of ours at the Kittson residence, so that aside from the scientific labors of the occasion there will be social pleasures for the ladies and gentlemen from abroad."

Dr. Wheaton presented the president of the association, Dr. Henry O. Walker, Detroit, who delivered the "President's Address." He said, in part: The path thus far has been strewn with roses, and I hope it will so continue to the end. I have found it difficult to secure a subject which has not been thoroughly threshed over and over again. I have, therefore, departed from the usual course, and will offer some suggestions in a purely scientific vein by reporting three cases, in which four operations were done, representing nearly all the operative procedures now done upon the kidney.

CASE I.—Saculated kidney, with suppuration and nephrolithiasis, and nephro-lithotomy and subsequent nephrectomy. August 4, 1896, J. R., aged 29, was referred to me for operation, with a history of severe pain in the left kidney twenty years previously. These attacks recurred at intervals of one to three months. This continued with increasing severity until three months before I saw him, when it became constant. There was sediment in the urine for nearly fifteen years. Examination of urine showed pus in quantity, blood at times, but no casts. He presented a marked emaciation, rapid pulse, temperature 99.6. Percussion revealed well marked dullness on the left side. I had, however, suspicion of trouble in the right kidney, therefore the character of the operation to be done must be in conformity with that suspicion. The wound has nearly healed, appetite good, and he walks about the hospital. There is yet some pus in the urine. I here present you with the kidney, together with the calculi removed.

Digitized by Google

Case II.—Tubercular kidney and nuclein treatment. The diagnosis was disease of the right kidney. Microscopical examination failed to reveal bacilli, but contained large quantities of pus and epithelium. A nephrotomy was done August 16, 1896. It is not always possible to determine the true character of secretions and excretions from important organs, even by careful microscopical examinations. Clinical impressions are most important. The nuclein treatment was instituted, with marked improvement until she left the hospital, September 9th.

Case III.—Movable kidney—fixation by a modification. Chronic constipation, flatulence, indigestion, supraorbital neuralgia, and pain in the right hypochondriac and lumbar regions. A freely movable tumor in the right hypochondriac region. My experience in fixation of movable kidney has been most satisfactory. The kidney was placed in its proper position and the capsule divided for a distance of thee inches on its convexity, using care not to wound the cortical substance. The capsule was then separated from the kidney for one inch entirely around the cut and by interrupted catgut sutures. The cut edges were fastened to the fascia and muscle, so that when the suturing was complete there was a solidity of fixation of the kidney. I do not use the deep suture through the substance of the kidney. The simplicity of the method commends itself, both as to safety and a greater probability of permanent good results. The most practical route to the kidney is anteriorly. The selection of the lumbar route is largely by precedent. A nephrectomy for tubercular kidney is not always practicable. Fixation of a movable kidney is best done by stitching its reflected capsule to the muscles.

The reports of the secretary and treasurer were read and accepted.

The report of the committee appointed on preservation of the transactions was received from Dr. Coulter and the matter referred to the executive committee.

"A New Operation for Cleft Palate" was read by Dr. Truman W. Brophy, of Chicago. He took the ground that the operation should be performed much earlier than has been the custom of surgeons heretofore. It has usually not been thought advisable to operate for the closure of cleft palate until the child has reached the age of two to five years. He maintains that when the operation was thus postponed the changes in the voice had become permanent, and a repair of the cleft at that time would not react favorably in the voice production. His operation consisted in freshening the edges of the cleft, then by deep sutures of silver wire, fixed through a lead plate conforming to the palate, the edges of the cleft are thus drawn together and so maintained until healing takes place. The technique of the operation was minutely explained. It was original with the author and in his experience has proven most effectual.

Dr. C. H. Hughes, of St. Louis, Mo., read a paper entitled "The Psych-neural Factor in Clinical Medicine." The physician must consider the whole mechanism of the system when treating any one part. Some parts of the body influence the whole, less or more than others. The surgeon must consider the susceptibility, predisposition, powers of resistance, recuperative powers, and natural courage of the patient in determining as to the prognosis or operation. In any case the nervous system is either for or against him. Painful ovaries, neuralgic, congested, or inflamed, are not necessarily to be cut out; but to be cured by neurological treatment. The surgeons are beginning to recognize only those symptoms which come under their own legitimate sphere. He must have a wide neurological and psychiatrical knowledge if he would avoid fatal mistakes. Much can be done in improving the case often by tranquilizing neurological treatment. In fatal surgical results the reputation of the operating surgeon often suffers because of overlooked neurological conditions which are at fault. Hope is itself a buoyant medicine; and faith in the physician or surgeon is a therapeutic power that should never be shattered by us.

Dr. Hugh T. Patrick, of Chicago, read a paper on "Trunk Anesthesia in Locomotor Ataxia." In substance, he said: In nearly all cases of tabes dorsalis there is a band of anesthesia about the trunk at the level of the nipple. It is, early in the disease, very narrow or even incomplete, or may be represented by a zone in which the localization of touches is not normally accurate. The sensory blunting on the leg so frequent in tabes is generally an analgesia. The trunk anesthesia is essentially tactile, and the pain sense may be quite normal. The band of anesthesia does not correspond to the cutaneous distribution of the intercostal nerves, but to the nerve fibers arising from adjoining segments of the spinal cord. In some cases there are two distinct zones of anesthesia, indicating simultaneous involvement of spinal segments at some distance from each other. The borders are inconstant, ordinarily retract on continued testing, and vary in position with the method of examination. The same band of anesthesia may occur in syphilitic pseudo-tabes, as shown by an illustrative case, as far as known, the only one on record. The patient presented nearly all the symptoms of locomotor ataxia, including a wide band of trunk anesthesia, but a diagnosis of syphilitic disease of the cord was made, and under an active specific treatment he made an almost perfect recovery.

The principal characteristics of the symptoms were illustrated by numerous diagrams and photographs.

Dr. Hughes, in discussing the paper, said: It is not surprising that these peculiar areas of anesthesia should be found in locomotor ataxia; considering that the entire symptom complex of the disease is due to disturbance of the sensory

Digitized by Google

mechanism. I have asked the doctor whether any of his patients were women, and if so, how many. For I have long taught that organic disease may give expression to a latent hysteria, causing a combination of the two diseases. In locomotor ataxia we may have not only anesthesia and analgesia, but also hyperesthesia and hyperalgesia.

Dr. Gustavus Blech, of Detroit, read a paper on the "Treatment of Some Inflammatory Diseases of the Gastro-Intestinal Tract." He said that the treatment of catarrh of the stomach and other similar inflammatory conditions of the same, as it is practiced to-day by most medical men, meets with failure because the treatment is directed against the symptoms and not against the cause of the disease. All the usual remedies may improve one or the other symptoms for a limited time, but the etiological morbid condition still remaining, the symptoms necessarily will appear again. The treatment is directed against the inflammation itself. He prescribes hydrozone, well diluted in water, at least a quarter of an hour before each meal. The oxygen which then develops kills the germs, cleanses the membrane of the wall of the stomach, without injuring the animal cells. It is an efficient and powerful, yet still bland and innocent remedy. The doctor then explained the cure of a case of gastric ulcer with the above treatment. He has seen the most stubborn cases recover, and hence he believes the treatment will heal ulcers of the stomach.

Dr. Paul Paquin, of St. Louis, read a paper entitled "The Treatment of Experimental Tuberculosis in Animals by the Use of Blood Serum." The use of antitoxin goes back to the active principle underlying immunization, an agent which is itself curative to a certain degree.

Tuberculin is, to a degree, capable of modifying certain forms of tuberculosis. The inconvenience resulting is chiefly in the more or less severe reaction following. It is now claimed that tuberculin may be made with this poisonous principle eliminated.

Experiments in guinea pigs, unfortunately, do not give the same results that they do in the human subject. Furthermore, the experience of investigations with the serum therapy treatment of tuberculosis varies greatly in different cases. They all, however, demand of any treatment absolute cure of the tuberculosis when used in the human. We have been busy with all possible and varied forms of experimentation in the smaller animals; but we are not always able to properly interpret the results of any given form of treatment and then make an exact application of those principles to man as a reliable guide.

In guinea pigs inoculated with tuberculosis and then treated with serum 10 per cent were saved. Later results show very much higher percentage than this; from 25 per cent to 55 is favorable. In the human 226 cases showed about 60 per cent favorable, with 40 recoveries and 120 improved. Antitubercle serum is positively curative in many cases; it has passed the experimental stage, but yet we know it is not perfect. From my own, and the experience of others, it will be observed that only a relative number of tuberculous patients can, with our present knowledge of tuberculosis and antitubercle serum, be treated successfully. If it does not succeed it is because of existing conditions, such as intolerance to serum injections of any kind (which is very rare), general destruction of physiologic equilibrium beyond repair, incurable lesions, or mixed infection.

Dr. Longstreet Taylor, of St. Paul: It is not necessary that the serum should produce an antitoxin in the body. It will in many cases give most gratifying results, but in others, for some reason, it is just as disappointing. My experience with the Paquin serum has not been entirely satisfactory, but I intend to give it further tests.

Dr. I. N. Love, of St. Louis: We have heard several papers on this most important subject by the same author during the past four years. Maragliani recently published his work on the subject. It is now almost beyond the stage of experimentation, but we must not be too hasty in our conclusion, for at least ten years' experience is necessary before anything is positively and definitely known.

Dr. W. F. Barclay, of Pittsburg: The paper shows us that there are honest men at work, and we should hail all honest effort with delight. I am satisfied that some such men as Paquin will demonstrate the ultimate success and positive value of antitubercle serum, and I hope criticism will not discourage him and others.

Dr. H. W. Loeb, of St. Louis: At the last meeting I presented some reports relative to the treatment of laryngeal tuberculosis with serum. I promised at that time to report the results. While they have not been as good as we had hoped, yet they are such as to encourage still further attempts. Knowing that these cases at best are almost always fatal, we, as well as the patient, are glad to try anything that gives the least hope of a cure. Of the cases reported at least two are yet living and well. Of two others I cannot say, but at latest reports there was no return. I believe the serum treatment will eventually be the method, but we must go farther before we can say it is a specific.

Drs. W. F. Daley, of Pittsburg, Charles Green, of St. Paul, and Joseph Muir, of New York, also discussed the paper.

Dr. E. M. Houghton, of Detroit, read a paper on "A Demonstration of the Therapeutic Action of the Antitoxina." The author reviewed the theories of serum therapy, demonstrating the differences between toxins and antitoxins. It has not as yet been shown just how the antitoxin counteracts or destroys the toxin. I have brought six guinea pigs for demonstration. I will inject three of these with the toxin cultures, the other three with the antitoxin and toxin. The discussion of

Digitized by Google

the paper was postponed until the result of the injection on the animals should be determined.

Dr. Joseph Muir, of New York, read a paper on "Reinfection in Consumption." Statistics show that a first attack is not usually fatal, and death is often found to be due to other causes. Primary infection is not usually due to inherited tendencies, but external conditions play a most important part. Consumption is best treated among the rich. Frequently, indeed, a permanent cure is effected in this class of cases; so for evident reasons those who are poor should be given especial attention. Patients who have been cured must not be allowed to return to their former environment. Redevelopment is inconsistent with clinical experience.

Change of air and outdoor exercise and labor hardens and freshens the tissues, and the respiratory impurities of former environment are no longer present. Reinfection may be prevented by, first, thorough disinfection of the patient and surroundings; second, destruction of the sputum. This protects the patient against himself.

Dr. H. J. O'Brien, of St. Paul: I am satisfied there are many cases of reinfection. I have sent them away and in six months they would come back to die; by staying away they will sometimes escape contagion and reinfection.

Dr. J. A. Larrabee, of Louisville: I have long believed, if a consumptive could have these conveniences and this care in the beginning, along with a stuffed feeding, that in many cases we could check or abort entirely the disease. The most terrible mistake is made in sending subjects away for treatment. Home is best, no matter where that home is. Improve it all that is possible, but leave them among friends. I think there is much in this idea of reinfection.

Dr. R. H. Babcock, of Chicago: The author, of course, does not claim all cases are of infection. I wish to emphasize in the strongest possible terms the idea that if sent away and they improve they must stay away permanently.

Dr. J. B. Murphy, of Chicago, read a paper on "Indications for and Demonstrations of Removal of the Gasserian Ganglion." (See page 149.)

The nominating committee, consisting of Drs. Scott, Coulter, Barclay, Love, Manley, Mathews, Lee, Walker, and Wishard, reported the following list of officers for the ensuing year: President, Dr. Thomas Hunt Stuckey, Louisville; first vice president, Dr. Charles A. Wheaton, St. Paul; second vice president, Dr. Paul Paquin, St. Louis; secretary, Dr. H. W. Loeb, St. Louis; treasurer, Dr. W. N. Wishard, Indianapolis; member of judicial council, Dr. H. T. Patrick, Chicago. On motion the report was unanimously adopted.

The next place of meeting was appointed at Louisville, the third Tuesday of September, 1897.

Dr. H. Horace Grant was elected chairman of the committee of arrangements.

[To be Concluded.]

Miscellaneous.

The lepra bacillus has been found in the blood, as well as in the tissues, by Dr. Bouffe, of Paris.

A teaspoonful of common salt to four ounces of water makes a good injection for thread-worms.

We are getting new subscribers every day, but we are not satisfied. We want more. May we not put your name on our list?

What About Therapeutics?—This is the question asked by the Western Medical Review, and repeated in detail, as here quoted:

"In looking over the lists of papers read, and to be read, before the different medical societies, one wonders if therapeutics is a thing of the past. Once in a great while a paper is read on the use of some drug, and occasionally one reads of a method of curing disease with medicines. But there seems to be practically no place given now for the scientific study of medicine from a therapeutic standpoint. Has the knife and the hypodermic syringe taken the place of all pills and potions? Have we advanced to such a point that there is no room for further study in drug action? Or are we leaving it to the various pharmaceutical houses to do our investigating for us and then accept their dictum as our authority? This is evidently an age of pessimism in regard to drugs, but is there not some danger that we may allow this pessimism to go too far?"

We wish to assure Editor Simmons that his doubts and fears are unnecessary. It may be that too great a number of papers are read, and by many "who are not called," with the natural consequence that mediocre "reports of cases," medicinal, surgical, etc., predominate and lower the average. It may also be the case that too many practitioners rely on the empirical use of ready-made pharmaceuticals, and thus forget or never learn the rudiments of pharmacology and therapeutics.

But the proportion of scientifically and broadly educated physicians is increasing very rapidly in this country, and the scientific study of therapeutics has never engaged more or better men than now. The proceedings of representative medical societies, and current issues of legitimate and leading medical journals, include a very satisfactory proportion of contributions on therapeutic subjects. These are the sources from which this journal draws much of the practical and instructive matter presented monthly to its readers—besides inspiring and printing many original contributions.

One of our exchanges recently printed a pleasantly satirical letter from a correspondent, who informed the editor that in this period of specialism, and finding most specialties "done to death,"

Digitized by Google

he had decided to adopt the specialty of general practice. That is the peg on which our contemporary should hang his "pessimism." Therapeutics is neglected by the average aspirant for publicity because it seemingly affords no special prominence; it is too general. Any 'ology, properly wooed, brings reputation and distinction. The broadly educated general practitioner, without a specialty, is too commonplace for average ambition.

But the study of therapeutics is, nevertheless, indispensable—even in all specialties. Progress in therapeutics is constant, and we may hope with undoubting optimism that the fashion to study and write on drugs and drug action will spread through all ranks.

Meanwhile the editor of the REVIEW—and other editors—might help along the movement by encouraging contributors to gather clinical observations on single drugs, and report, with deductions, for the general benefit of readers.—*American Therapist.*

Proceedings of the Nebraska State Board of Health.

MEMBERS—Dr. J. V. Beghtol, Friend, President; Dr. C. F. Stewart, Auburn, Vice-Pres.; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.
Board meets first Thursday of each month at the state capitol, Lincoln.

THE Nebraska State Board of Health, at its meeting held on October 1st, granted certificates to practice to the following:

Edward D. Bradley (R.), Boelus,
Albany Medical College, 1881.
H. G. Strouse (H.), Belgrade,
Hahnemann Medical College, Chicago, 1886.
William Millikens (R.), Hyannis,
Jefferson Medical College, 1895.

Altha R. Sloss, of DeWitt, presented a diploma of the Wisconsin Eclectic Medical College, dated 1896. This is the celebrated bogus diploma mill, once of Milwaukee, but now of Chicago. A certificate was not granted.

The application of O. O. Johnson, of Loomis, was rejected. This applicant claimed to have been entitled to register under the old law, but neglected to do so. When it was found that he was practicing without a certificate the board commenced to inquire into the matter, and he then applied for a certificate, with the above excuse. Inquiry developed the fact that he came to the state in 1887, and that he could not have registered had he desired to do so, for the reason that those only could register who had been in the state three years before the law was passed. He claimed to have practiced all his life,—according to his own statement commencing in 1850, which the board thought was pretty young to commence, as he was born in 1835 and could only have been fifteen. He had never been in a medical college. Considerable pressure was brought to bear on the board to grant a certificate to this man by several parties, but without avail.

The next application rejected was that of James P. Romine, of Ashland. This gentleman made application three months ago, making a sworn statement that he had graduated from the National Medical College and Hospital of Chicago, March, 1896. He had no diploma, but claimed it was granted and held for fees. The board inquired into the case and found that Mr. Romine had attended the Hahnemann Medical College of Chicago and had failed to pass his examinations in that college in March, 1896. That he immediately went over to this National College and in two weeks or less was graduated. His diploma was held for fees, they claim, although the more probable reason was that the college did not want to put his name among the graduates for 1896. In reply to a letter from the Nebraska State Board of Health, the assistant secretary of the Illinois Board of Health wrote, under date of August 13th, that their board recognized the National Medical College of Chicago. On August 14th E. C. Sweet, treasurer of the National Medical College, wrote the board a letter, from which we quote: "The degree of M. D. was conferred upon J. P. Romine by our college and his diploma is held for fees." On August 25th Dr. T. C. Duncan, president of the National Medical College, wrote to the board as follows: "I learn that your board refuses Dr. Romine a license on the ground that your board does not know that the college is recognized by the Illinois state board. If your board gets the Illinois report you will find that our college stands No. 343 on their list. We are duly and truly recognized and Dr. Romine is entitled to recognition at your hands." This ought to have been sufficient, for President Duncan said so, but the board evidently did not look upon President Duncan as the highest authority in the case. On August 18th Dr. Haldeman, the president of the Nebraska State Board of Health, received the following letter, which explains some things in reference to the case:

"THE HAHNEMANN MEDICAL COLLEGE AND HOSPITAL OF CHICAGO,
"CHICAGO, ILL., Aug. 15th, 1896.

"*F. D. Haldeman, M. D., Sec. State Board, Ord, Nebr.*—MY DEAR DOCTOR: Your favor of August 11th, in reference to J. P. Romine, is received. J. P. Romine failed to pass his examination in March, '96, and was refused a diploma on this ground.

"The time which elapsed between our graduation and that of the National College was about two weeks, so that he could not have put in any time at that college.

"A similar occurrence took place the preceding year with a student whom we declined to graduate because he did not come up to our standard. I reported that case to the Illinois State Board and have as yet heard nothing from them in

Digitized by Google

reference to it. Of course, my attention was not called to it until I saw the list of graduates for '96. Undoubtedly this candidate's name will appear in the National's list of '97.

"Very sincerely yours,

"Jos. P. Cobb, *Registrar.*"

Evidently the National Medical College people by this time were aware that they were getting into trouble, for under date of September 10th the secretary of that institution wrote to the Nebraska board a letter, in which he said: "He attended our review and spring course, lasting three months, and passed in a satisfactory manner the chairs he failed to pass in the Hahnemann. * * We had a right to graduate him, which we did, and his diploma is held for fees." Yet in his sworn statement Romine declared that he graduated from the National College in March, 1896. This agrees with the letter of Dr. Cobb, as quoted above, and Dr. Sweet, of the National, admits that he failed to pass at the Hahnemann this year. And yet they say that Romine "attended our review and spring course, lasting three months." The truth seems to be very badly tangled up by the officers of the National Medical College and Hospital of Chicago.

The board refused to recognize the college as being in good standing, and therefore refused to grant a certificate. The action of this college in graduating "plucked" candidates will tend to lower the standard of education more than anything that could be done. It is an injustice to schools that are trying to keep up the standard, from which they have no redress. The action of the Nebraska State Board of Health is to be commended.

Necrology.

Dr. Wm. M. Kelly died at Knox, Indiana, August 28th.

Dr. H. W. Pitman died at Jonesburg, Missouri, September 10, aged 75.

Dr. Robert M. Boyd, of Springfield, Missouri, died August 6th of typhoid fever.

Dr. Milton E. Artman, of Buffalo Creek, Colorado, died September 9th, aged 32.

Dr. F. W. Hance died at Freeport, Illinois, September 16, of heart disease, aged 74.

Dr. P. F. Beverly, of Columbus, Ohio, died of paralysis September 18th, aged 69. He was ex-president of the Ohio State Medical Society.

John Seibert, M. D., of Chicago, died there October 9th. He was one of the oldest physicians of that city, going there in 1857. He was quite wealthy, but never married.

John Eric Erichsen, F.R.S., etc., died at Folkstone, England, September 23d, aged 78. At the time of his death Mr. Erichsen was emeritus professor of surgery and consulting surgeon to University Hospital. He has held many important positions during his life, and was renowned both as a surgeon and as an author of many surgical works and works on physiology.

Books and Pamphlets Received.

Diagnosis of Tumors of the Brain. By J. T. Eskridge, M. D. Reprint from the *Colorado Medical Journal.*

Report of the Kensington Hospital for Women, from its organization to 1896. By Charles P. Noble, M. D.

Diagnosis of Chronic Abscess of the Brain. By J. T. Eskridge, M. D. Reprint from *American Journal of the Medical Sciences*, August and September, 1896.

A New Operation for Certain Cases of Procidentia Uteri. By Charles P. Noble, M. D. Reprint from the *American Gynæcological and Obstetrical Journal*, May, 1896.

Suspensio Uteri with Reference to Its Influence Upon Pregnancy and Labor. By Charles P. Noble, M. D. Reprint from the *American Journal of Obstetrics*, No. 2, 1896.

The Pneumococcus of Fraenkel as a Frequent Cause of Acute Catarrhal Conjunctivitis. By H. Gifford, M. D., Omaha. Reprint from the *Archives of Ophthalmology*, 1896.

Drainage vs. Radical Operation in the Treatment of Large Pelvic Abscesses. By Charles P. Noble, M. D. Reprint from the *Journal of the American Medical Association*, August 8, 1896.

The *Charlotte Medical Journal.*

This journal has lately increased the size of its reading pages and doubled its columns. The September number, which is now before us, is especially interesting. It contains a very large amount of reading matter. The editorial department has every evidence that the editors are scholarly men, and will be sure, with their continued effort, to make the journal one of the greatest in the country.

The *Hypnotic Magazine* is a new venture in the field of semi-medical journalism, devoted to the investigation of hypnotism, its uses, abuses, and therapeutic possibilities. It is edited by Sydney Flower and published by the Psychic Publishing Company, Chicago. The October number contains the first of a series of papers on the "Science and Practice of Suggestive Therapeutics," by Dr. M. H. Lackersteen, of Chicago, who writes from experience and with authority. Dr. C. G. Davis gives us a very practical and interesting paper on "Hypnotism and Its Application in Surgery." Other original and selected articles, all pertaining to hypnotism, make up an interesting number.

Digitized by Google

Therapeutic Notes.

Hepatitis Chronica.—

℞ Leptandrini,
Podophyllini, . . aa 0.01 gr. ⅙.
Euonymini . . . 0.20 gr. iij.
Ext. rhei . . . q. s.
M. Fiat pil. j.

Sig.—One in the morning and at night.

Chloasma of Pregnancy.—

℞ Zinci oxidi . . . . . gr. vi.
Hydrarg. ammon. . . . gr. ij.
Ol. theobrom. . . . . ʒ v.
Ol. rici. . . . . ʒ v.
Ess. ros. . . . . gtt. xx.

M. Sig.—Apply to the face night and morning. —*Hare.*

Lumbago.—A prescription of Dr. S. Solis-Cohen's is:

℞ Sodium salicylate . . . . . ℥ ss.
Potassium iodide . . . . ʒ ij.
Compound syrup of sarsaparilla . fʒ jss.
Water . . . q. s. ad. fʒ iij.

M. Sig.—A teaspoonful in water thrice daily, after meals.—*Pract. Med.*

For Eczema of Face and Neck.—Dr. Shoemaker recommends the following:

℞ Aristol . . . . . ʒ ss.
Camphor . . . . . gr. x.
Lanolin . . . . . ʒ iv.
Carbolic acid . . . . . gr. v.
Zinc oint. . . . . ʒ iv.

M. Sig.—Apply locally.

Hay Fever.—

℞ Liq. pot. arsenitis,
Ext. nucis vomicæ fl.,
Ext. cinchonæ fl. (detannated), . aa ʒ vj.
Alcoholis . . . . . ℥ iij.
Syr. aurantii . . . q. s. ad. ℥ xvi.

M. Sig.—One to two teaspoonfuls, taken three times daily, with or after meals.—*Hall.*

Tannin and Camphor in the Treatment of Erysipelas.—Sperandino (*Gaz. Degli Osped.*, 1895, No. 80; *Dtsch. Med.-Ztg.*, February 24, 1896) employs the following solution:

Tannin . . . . . 2 parts.
Camphor . . . . . 3 parts.
Sulphuric ether . . . . 15 parts.

The erysipelatous area is painted with this solution every hour or two, proceeding from the surrounding healthy skin toward the center of the patch. At first there is some burning, which is due to the evaporation of the ether. In a short time, however, a crust forms on the affected skin, the swelling goes down, and in a few days the cure is complete.

Local Anesthetics.—Dr. Loup (*Bulletin Medical*, 1896) says that when a fluid is injected under the skin the nerve filaments are rendered insensible by driving away the blood and temporarily preventing its return, producing an anemia. Dr. Loup, acting on this principle, has succeeded in producing an anesthetic area by means of a perfectly neutral substance—sterilized olive oil.

Emulsion of Iodoform.—

℞ Iodoform . . . . 10.0 gr. cliv.
Glycerini . . . . 200.0 ℥ vi. *m* ccxx.
Aquæ dest. . . . 50.0 ℥ j. *m* ccc.
M. Fiat emulsio.

For surgical practice.—*College and Clinical Record.*

An Antiseptic Wash for the Mouth.—The *Presse Medicale* for July 18th contains the following formula:

℞ Thymol . . . . . gr. iv.
Benzoic acid . . . . gr. xlv.
Tincture of eucalyptus . . gr. ccxxv.
Essence of peppermint . . gr. lx.
Chloroform . . . . . gr. xv.
Alcohol . . . . . ℥ iij.

M. Twenty drops of this solution in a glass of water may be used at a time.

Uremic Convulsions.—1. Removal of ten or fifteen ounces of blood, to be repeated if necessary.

2. Inhalations of chloroform until the convulsions are controlled.

3. Administration by enema of a mixture of—

℞ Musk . . . . . gr. vijss.
Chloral hydrate . . . . gr. xlv.
Yolk of egg . . . . . No. j.
Distilled water . . . fʒ v.

4. Administration hourly of a tablespoonful of a mixture of—

℞ Strontium bromide . . . . ʒ j.
Syrup of orange flower . . fʒ jss.
Distilled water . . . . fʒ iij.

5. Restraint of thighs and legs wrapped in cotton. Absolute milk diet.

For Gonorrhea.—According to Wyeth, early stages of gonorrhea should be treated by irrigation. He uses the following as a stock solution:

℞ Potassi. permanganatis . . . gr. x.
Aquæ puræ . . . . . ʒ j.

Sig.—Tablespoonful of this solution in a quart of warm water.

In addition to the local treatment, the following formula should be prescribed for internal use:

℞ Salol . . . . . ʒ j.
Oil of gaultheria . . . . ʒ ij.

The dose of this solution is twenty drops four times a day. It may be given in water or sugar, or, preferably, in capsules. The effect of this is to sterilize the urine, which, as it is passed, aids in urethral antisepsis.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. I. No. 7. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. NOVEMBER 14, 1896.

Original Articles.

THE MANAGEMENT OF CONGENITAL DISLOCATIONS OF THE HIP.*

BY BYRON B. DAVIS, B. A., M. D.,
OMAHA, NEB.,
CHIEF SURGEON TO IMMANUEL HOSPITAL.

Concerning the etiology of this deformity it is not my purpose to enter into detail. The most plausible reason given for the dislocation seems to be that in intrauterine life, on account of the uterus being relatively too small for the size of the fetus, the thighs are abnormally adducted and flexed. Eighty to ninety per cent of the cases occur in females. Traumatic dislocations occurring during delivery are not rightly classed as congenital.

Only the points in the anatomy of this condition which have a direct bearing upon the form of treatment which should be carried out will be touched upon. The displacement is almost always upward upon the dorsum of the ilium. The head of the femur, if present, is usually flattened from side to side, but sometimes has a conical shape. It may be absent. The neck of the femur is shortened and in most cases stands almost at a right angle with the shaft. The ligamentum teres is often absent, sometimes very thin, and occasionally is much hypertrophied, the latter condition evidently being due to its having been the chief support of the body-weight.

The condition of the capsule is dependent upon the position, size, and shape of the head as well as the age of the patient. In old cases it is often of an hour-glass shape, being atrophied at the center and enlarged at either extremity, below to correspond to the rim of the natural acetabulum, and above enclosing the head on the dorsum ilii.

The state in which the acetabulum is found has been a subject of disagreement, many claiming that it is frequently absent. But the investigations of Hoffa, Lorenz, and Royal Whitman seem to prove conclusively that it is never wholly wanting. It is often so filled with dense connective tissue that a careless or inexperienced observer would declare that it did not exist. Hoffa distinctly asserts that if one searches in the proper place and has in mind that dense connective tissue may fill the cavity one will surely find it. The rim is not developed; the diameter of the cavity is much less than it normally should be at the corresponding age.

In all old cases the muscles about the joint are shortened and pull at altered angles to conform to the abnormal position of the head of the bone. The trochanter is above the Nelaton line. The limb is adducted and rotated inwards. The fascia lata and the other fasciæ and the ligaments adjust themselves to conform with the changed relations.

The scope of this article will not permit entering in detail into a discussion of the symptoms and diagnosis. The characteristic waddling gait and lordosis of double dislocation are so pronounced and typical that they cannot be mistaken for anything else. In unilateral dislocation the diagnosis is beset with greater difficulties, but if one has in mind the ascent of the greater trochanter above Nelaton's line, and that in extreme adduction and flexion of the thigh the head of the femur can be felt upon the dorsum ilii, no errors should be made.

From these few cardinal points in the pathology it is easy to see what must be accomplished in the treatment in order for it to be fruitful in results. The shortened muscles and fasciæ must be stretched or cut; the adducted and inverted limb must be brought into the position of abduction and eversion; the small undeveloped shallow acetabulum must be deepened and enlarged either through direct surgical measures or by means of long continued pressure, which will eventually bring about absorption and the production of a cavity to correspond to the size and shape of the body producing the pressure; the head must brought down to the natural acetabulum and kept there, and finally by massage, exercise, etc., the muscles must be brought to functionate easily and perfectly in their new relations.

Three plans of treatment have been developed and have their adherents:

First—The orthopedic, with such men as Schede, Miculicz, and many others practicing it.

Second—The forcible bloodless reposition under an anesthetic, as done by Paci.

Third—The bloody operation first proposed and performed by Hoffa and afterwards modified and further developed by Lorenz.

The wordy warfare over the relative merits of these different methods continues with unabated ardor, and there is yet no settled line of action. With Schede, Miculicz, Bergman, Shaffer, Bradford, Dolega, and Heusner favoring orthopedic measures in the majority of cases; Paci and his

* Read before the Medical Society of the Missouri Valley, Council Bluffs, Ia., eptember 17, 1896.

Digitized by Google

followers, with some backing by Lorenz, sounding the praises of forcible bloodless reposition under an anesthetic; and Hoffa, Lorenz, Royal Whitman, and many others giving countenance to the Hoffa-Lorenz operation, there is an abundance of authority in support of each line of procedure.

I have been led to look up this subject on account of a case which fell into my hands June 26, 1896. The patient, contrary to the rule, is a male, twenty months old at time of beginning treatment, small for his age, but healthy. A limp was noticed soon after he began to walk, at about the age of fifteen months. The limp has become more pronounced as he has improved in his powers of locomotion.

The right trochanter was found above Nelaton's line, the extremity being held slightly adducted and the foot inverted. Shortening of three-quarters of an inch. The shortening could not be overcome without the exertion of more force than the little patient could bear. When the thigh was brought into an extremely adducted position and flexed upon the abdomen the head of the femur could be distinctly felt on the dorsum of the ilium.

He was put to bed June 27th with weight and pulley extension, the limb being slightly abducted and rotated outwards. This was continued for nearly four weeks, by which time all muscular and fascial resistance had been brought under easy control.

When this had been accomplished he was treated in the manner devised and so strongly recommended by Miculicz, viz.: Extension with extreme abduction and extreme eversion of the foot, while pressure is kept up over the greater trochanter by means of a girdle, thus crowding the head of the femur firmly against the natural position of the acetabulum. This is kept up for twelve to eighteen hours out of the twenty-four, while during the day the patient is allowed to be up walking about. The only restraint he is subjected to while taking his exercise is that he must always have a rigid band about his pelvis wide enough to completely fill the space between the crest of the ilium and the greater trochanter, and buckled so firmly as to render it practically impossible for the head of the bone to ascend from the natural acetabulum to its old position on the dorsum of the ilium. The parents are also exhorted to be very careful that he does not at any time become excessively tired. The child is doing well, though it is yet too soon to expect any definite results.

I was led to adopt this method of Miculicz after studying his careful description and report of cases (*Archiv für Klinische Chirurgie*, Band XLIX.). I had an opportunity to observe several cases under Schede's method of treatment while in Hamburg, and Miculicz' plan seems to have several points of advantage over Schede's. The chief claims for superiority are that the general health of the child is maintained by regular daily exercise; that the muscles and ligaments are made to perform their regular functions in their normal relations, and their tonicity is assured; and, finally, that the very act of walking with the head of the femur held in its proper position helps to deepen the acetabular cavity and to give it its proper shape. Giving a chance for daily exercise is itself sufficient to influence one's choice in favor of the Miculicz method if it offers any reasonable promise of success. His statistics are as good as Schede's; the mode of treatment is many times less irksome to patient, parents, and surgeon.

Paci's method of forcible reposition of the head of the bone into the acetabulum seems to have only a limited application. In younger children few cases will be found in which reposition is not possible by means of proper extension combined with abduction and outward rotation. There can be no good reasons for producing a deliberate traumatism upon the delicate joint of a small child, running the risk not only of simple inflammation, but of tuberculous infection as well, where a simpler and safer procedure will accomplish the same result in a little longer time. On the other hand, in the older cases not reducible by simple extension, Paci's method is not likely to be successful, leaving the Hoffa-Lorenz operation as the only procedure offering reasonable hope of relief.

An abridged description of this ingenious and epoch-making operation may not prove to be uninteresting. The anterior and lateral surfaces of the capsule are first exposed and laid bare by means of Langenbeck's incision. The capsule is now freely opened while the femur is strongly rotated outwards, the ligamentum teres is removed if present, and now the acetabulum can be examined with the finger. As has been already stated, it always exists, and one should search for it, being mindful of the delusiveness of the dense connective tissue which frequently obliterates the cavity.

The next step should be to hollow out the acetabulum by means of a specially constructed bayonet-shaped curette. This can best be done under the guidance of the left index finger. In most cases the bone is thick enough so that there is no danger of perforating it. The cavity should be made not only deep enough but broad enough to support the head in its new position. The borders should not be shelving, but sharply cut, the upper border being especially prominent.

The reposition of the head into its proper position is the most difficult step in the operation. In young children it is easy, but in older subjects, the class to which operative treatment is especially adapted, it is beset with much difficulty. The chief hindrances to reposition are the shortened muscles, especially the glutæi, the adductors, and the anterior and posterior thigh muscles which take their origin from the pelvis. In addition to the muscles are the shortened fasciæ and the short upper margin of the capsule.

At first Hoffa operated by cutting all muscles,

Digitized by Google

tendons, fasciæ, and ligaments which offered obstruction to reposition. This made a very bloody operation, with severe shock, and leaving a long continued weak condition of the soft parts, and it has now been abandoned for a simpler and safer method which is as certain. Lorenz shares with Hoffa the honor of devising the method which is now generally practiced, the preliminary stretching of the soft parts by very powerful extension. Little, if any, myotomy or fasciotomy is necessary, and the after results are much better. By strong extension under profound narcosis, with proper manipulation, the soft parts having been previously well stretched, it is not usually very difficult to cause the head to snap into place.

The wound is not closed by suture, but tamponed with gauze. Hoffa recommends plain sterilized gauze, as he has had one death from poisoning after the use of iodoform gauze. After from three to eight days the tampon is removed and the lips of the wound drawn together by means of a roller.

Lastly, while the limb is extended and slightly abducted a plaster-of-Paris dressing is applied and worn for four or five weeks; then an apparatus, and at the end of six or seven weeks all supports are removed and gymnastics, massage, and electricity are systematically practiced until good use of the limb is obtained. Even in the best of results the normal arc of motion in flexion, abduction and adduction, is scarcely ever obtained, but the result is considered good if the limp is slight, showing no tendency to increase.

The answer to the question, What is to be expected of the operation? cannot be better ascertained than by a study of Hoffa's own statistics as published by himself (*Archiv für Klinische Chirurgie*, Band LI.). He has operated upon eighty-two patients, of whom thirty had double dislocations and fifty-two single, making 112 joints operated upon. Of these eighty-two patients seven died, three of them of diseases in no way connected with the operation, one of pneumonia, one of intestinal catarrh, and one of diphtheria. Three of the other deaths were from shock and the fourth from iodoform poisoning—iodoform gauze having been used to tampon the wound. These deaths were all from his earlier operations. Now that the technique has been perfected he has not had a death among the last forty-seven operations.

All of the cases had slight shortening remaining, but not enough to cause any especial limp. The activity and usefulness of a newly formed joint Hoffa considers dependent largely upon the condition of the muscles, since, according to Trendelenburg's teachings, in dislocations of the hip-joint there is an atrophy of the gluteus medius and minimus. Unless correction of the deformity is done very early this atrophy can never be overcome. After the operation there is usually a sinking in of the gluteal region, due to atrophy of these gluteal muscles. It is largely to overcome this atrophy that massage and electricity are used so vigorously after the operation.

Nine of Hoffa's eighty-two cases operated upon had more or less complete anchylosis, all but one of these having suppurated at the time when he practiced immediate suture. Since he gave up the use of the immediate suture and has not resorted to very early passive motion no cases of anchylosis have occurred and he does not fear it. The ninth case of anchylosis was double. Both wounds healed nicely *per primam*, but too early and too forcible passive motion was resorted to, which caused irritation and finally a double bony anchylosis, the nine-year-old girl being able to walk only by a peculiar gait—all motion occurring at the knees. Osteotomy was practiced through each trochanter, a pseudarthrosis being obtained upon one side only, but this caused great improvement in ambulation.

No case of stiffness has developed in any of Hoffa's cases after discharge from treatment, and in no case has the condition retrograded after discharge, but has usually improved.

Reluxation backward has not been observed, but reluxation, or rather transposition, forward has been observed in eight of Hoffa's cases, four of these having been done early, before the full development of the technique, the acetabula not having been deepened. The four other cases in which transposition forward occurred Hoffa attributes to the fact that the forward border of the acetabulum was made too flat.

With the three methods of treatment before us and having well in mind the anatomical difficulties to be overcome, how are we to decide which treatment is best suited to a specific case? There is evidently no one treatment applicable to each case that presents itself, neither can it be said that the method to be employed is merely a matter of arbitrary personal choice on the part of the surgeon. I take it for granted that none would think of doing the more dangerous operation in any case in which there was good promise of success in orthopedic treatment, at least until this simpler and safer method had been tried and failed. The first question which would naturally arise then when a case of congenital dislocation of the hip presents itself is, Can this deformity be overcome and a functionally good result obtained by any form of orthopedic treatment? The answer to this question is not by any means absolute in any case, but the conjectural answer is dependent upon the age of the patient and the degree of muscular and fascial contracture, not forgetting that the results in the most favorable cases are likely to be negative unless the patient can be under the constant and absolute control of the surgeon.

As a rule, in a patient under six or seven years of age, unless the distortion is considerable and the muscles and fasciæ very rigid, it is worth while to undertake orthopedic treatment, not neglecting to impress upon the parents the fact that if this method is found after a few months not to be ac-

Digitized by Google

complishing the desired results, it will be necessary to resort to operation. This is doubly important, because in some cases which appear at first most favorable the results of treatment are very disappointing.

As a preliminary to any form of treatment by apparatus it is usually more satisfactory to use the weight and pulley extension for a few days, or until the rigidity of the thigh muscles has been overcome and the fasciæ stretched to such an extent that the head of the femur can be brought down to the natural position of the acetabulum. While this is going on adduction and inversion will be gradually corrected. I look upon this preliminary extension as a valuable test of the suitableness of a case for orthopedic treatment. If within a reasonable time it becomes possible to bring the head down to its normal position, the case would seem promising under orthopedic measures. Should extension not accomplish this within one to four months, time will be saved if orthopedic treatment be given up and the case looked upon as an operative one.

Some authorities are not at all in agreement with the above. Royal Whitman, for example, in the latest number of the *Medical Record*, September 12th, 1896, makes the following statement of his position: "There now seems to be, if not an open acknowledgment, certainly a tacit acceptance of the fact that there can be but one effective treatment of this condition, and that is to replace the head of the bone in its normal position, either in the acetabulum or an enlargement of its rudimentary indication." Although the quotation does not exactly so express it, the context shows that what is meant by the "one effective treatment" is the Hoffa-Lorenz operation in every case. This is carrying the operative treatment to greater limits than even its fathers, Hoffa and Lorenz, have ever advised. Hoffa does not operate upon any child of less than two years. Although he declares that the most favorable age for the best results from his operation is between two and eight years, even within these limits he considers a preliminary effort at orthopedic treatment not only justifiable, but he advises it.

If a child under say eight years has been under treatment by extension and it has proven impossible to bring the head down, or if, after long-continued treatment by means of an apparatus, no progress has been made in deepening the acetabulum or obtaining a greater fixedness and security about the joint, the Hoffa-Lorenz operation should be done.

But if the patient, when he presents himself for treatment, is past eight or nine years of age, orthopedic treatment is futile, and the only advice should be for an operation. An exception to this should be made if the case has reached full adult life and the disability and discomfort are not very marked. Under such circumstances it is questionable whether the prospects for improvement are a sufficient offset to the discomfort, risks, and loss of time which the operation imposes. When the disability is not marked it is not only necessary to consider the risk to life, but that, if the result is not good, the condition may be made worse than before the attempted cure. Or, as Miculicz puts it, "In each case carefully weigh the chances, not only what the patient has to win, but also what he has to lose."

If, on the other hand, the adult patient's disabilities and discomforts are considerable, and the victim is forced to follow a laborious occupation, being much on his feet, the indications for operation are much clearer, and he should be given the benefit of all the gains which can be thus acquired.

It has seemed to me that the victims of congenital dislocation of the hip are not given that careful attention and consideration which their condition demands. The barren results of the older forms of treatment have discouraged the profession from advising any form of treatment whatever, and the sufferer is bluntly told that nothing can be done for him and that he should seek a less active occupation. Or the more ignorant or less candid doctor informs the parents that their child's disability will become less as he grows older—a statement directly contrary to the fact.

The usual progress of these cases has been most succinctly put by Royal Whitman in the article already referred to. He says: "It may, then, be confidently predicted of the individual suffering from this disability that the awkward and noticeable waddling gait will continue; that weakness and disability, compared with the normal condition, will be marked; that pain and discomfort in the lumbar region, which is almost always the accompaniment of abnormal lordosis from any cause, will be experienced at times; and that discomfort or pain at the weakened joints may be expected after over-exertion.

"There is a probability that the disability will increase, and there is a very decided possibility that the restriction of motion and repeated inflammations may to a great extent disable the patient in later life."

A new era has dawned for this class of deformities. The careful and scientific demonstrations made by Hoffa of the pathology of these dislocations, besides leading to the masterly and ingenious operation which bears his name, has given an impetus to orthopedic measures not possible while so little was known of the real condition with which it was necessary to contend.

A HYPODERMIC of atropine will relieve a severe paroxysm of asthma, and is free from the objections of morphine.

"JOHNNIE, I suppose you are delighted with the new little brother at your house?"

Johnnie—"New nuthin'! He's second-hand! The doctor brought him, and there's no tellin' how many families has had him before."—*Detroit Free Press.*

Digitized by Google

THE DIAGNOSIS OF TYPHOID FEVER.

By JOHN ELIOT WOODBRIDGE, M. D.,
CLEVELAND, OHIO.

The great problem now awaiting the solution of the medical profession is the diagnosis of microbic diseases, and, above all, the early and positive diagnosis of typhoid fever stands pre-eminent in importance. The accurate and definite differentiation of this infection is of the utmost consequence to the sanitarian, because it is essential to the institution of efficient preventive measures, and as the immediate institution of prophylactic procedures are of grave interest to the individual, they are equally so to the community at large. It is of vital importance to the patient, because upon it depends the method of treatment which he receives, and upon this may depend his life. That the friends of the patient are interested is quite obvious, and to the attending physician it is of especial import, for he must long to escape from the embarrassment of giving to the patient each day the stereotyped answer, "I do not know what ailment I am attempting to treat yet. Wait till to-morrow;" and then again on the morrow, "Wait for pathognomonic symptoms of the disease to appear, perhaps for eight to ten days longer."

But it is of supreme importance to the little group of physicians who know that typhoid fever can be aborted, and who only await the means of demonstrating that the malady that they are jugulating is typhoid fever, to prove beyond question the truth of their assertions. Give us the means of making an early, an accurate, and a positive diagnosis of this infection,—a sign by which the physician may know that this is or is not a case of typhoid fever, so surely that no man may question it,—and we will at once demonstrate that the disease can be aborted. We who have known this truth have for years sought for such a sign. We have turned to the bacteriologist, hoping that he would teach us how to differentiate with certainty between this and all other ailments, but we have met with disappointment after disappointment. However, at the Buffalo meeting of the American Public Health Association, Prof. Wyatt Johnston, the bacteriologist of the board of health of the province of Quebec, read a paper in which he outlined a method of recognizing the disease which, if it give performance at all commensurate with its promise, will bring to light many a hidden truth. This method is a simplification of that proposed by Widal, of France. Dr. Johnston, I believe, gives to Pfeiffer, of Germany, the credit of having first proposed the method as a means of diagnosticating diphtheria.

The technique of Dr. Johnston's procedure is simple, very easily carried out, requires but a few minutes of time, and gives the patient less annoyance than an ordinary physical examination. The tip of the finger, being thoroughly cleansed, slightly compressed, and pricked with a sharp needle, gives one drop of blood, which is dried. When this is to be examined it is moistened with a little water, and a drop of this serum is mixed with a pure culture of Eberth's bacilli, suspended on a cover glass in an ordinary cell slide. Examined microscopically, these are found to be motionless and agglutinated, if the patient have typhoid fever, while if (as far as we now know) the patient is suffering from some other malady, they move freely from place to place. The diagnosis should in every instance be verified by a control test. Dr. Johnston said before this distinguished body of sanitarians that before leaving home he directed his assistant to take specimens of blood from each of a number of patients, some of whom were known to have typhoid fever and others to be ill with other maladies. Slides numbered from one to six were sent, accompanied by a sealed key. Dr. Johnston examined these in the presence of other physicians, and after each number wrote his opinion. That Nos. 1, 2, and 3 had typhoid fever, while Nos. 4 and 5 had not; and No. 6 probably had not that disease. On opening the sealed package containing the key this was found to correspond exactly with what the doctor had written.

If further experience should prove that by serum diagnosis, or by any other method, we can positively differentiate typhoid fever from all other ailments as early as it is claimed that we can, we are on the eve of wonderful advances in medicine. The treatment of diseases will become more and more scientific. Serum therapy will be assigned to its proper sphere and the value of the abortive treatment of typhoid fever will be established.

J. Lewis Smith is authority for the statement that a thick Meibomean secretion of puriform appearance collecting between the eyelids is a bad prognostic sign, indicating a state of serious depression.

Cranberry for Small Boils.—For a boil on the end of the nose, where an ordinary poultice would be of no avail, Dr. Carl Seiler recommends a raw cranberry crushed and laid over the part, and kept in place with a dab of stiff boiled starch. He finds that it will relieve the excruciating pain in a short time, and cure the trouble in twenty-four hours.

Fetal Heart-Rate and Weight of Infant Sex.—Judging from 1,000 cases at full term at the Boston Lying-in Hospital, the average rate of the fetal heart is as follows: Five hundred male, 140.26; 500 female, 141.83; or only a difference of one and a half beats. The average weight of these 1,000 full-term babies was as follows: Five hundred male, 7 lb. 8.9 oz.; 500 female, 7 lb. 5.1 oz. Of 7,515 deliveries at the Boston Lying-in Hospital the heaviest infant was a female weighing twelve pounds.—*Boston Medical and Surgical Journal.*

Digitized by Google

A LESSON IN HEMIPLEGIA.*

By J. LUE SUTHERLAND, M. D.,
GRAND ISLAND, NEB.

Doubtless most of you, in looking over the program, have noticed a striking sameness in the title of this paper and the one I was to have read at our last September meeting. By way of explanation, circumstances prevented me from attending at the time, and being unwilling that so much labor and energy should be wasted, saying nothing as to what the medical fraternity would suffer in consequence, I have decided, even at the risk of criticism, to read a paper written half a year ago, which in this day of rapid progress in all things medical may justly be considered a back number. If apology is necessary, first, I will say that my experience in the management of cases of this kind has been rather limited, for in a general practice of over fifteen years but five cases have come under my care, four of which terminated fatally within a few weeks. Secondly, the present condition of the patient whose case I have given in detail is such that not only my diagnosis made in the beginning seems to be confirmed, but my prognosis will in time be verified. Notwithstanding, however, this very gratifying state of affairs, I wish to emphasize here what I at that time said, that no physician is justified in giving an unqualified prognosis that such patients will ultimately regain their former vigor and activity, unless adult age has not yet been attained and the symptoms at the time of the onset were mild and of such a trivial nature as to plainly indicate only a small and very superficial portion of the brain to be involved. I mean, of course, those cases from which we may exclude any and all forms of trauma, both immediate and remote, as original factors in the etiology. For where the cause is purely idiopathic, we can but concede that pathologic conditions have existed for some time, and if we would expect a perfect restoration to the normal we must go farther back in our treatment than to the time of the onset; in short, we must repair or create anew the machinery which did such faulty work as to produce miliary aneurism, develop embolism, or favor the formation of thrombi. But as our assistance is seldom invoked prior to the onset of the symptoms, we are compelled to accept this as our starting point, and realizing that at best we have a badly damaged organism upon which to work, our most favorable prognosis can have but a relative value.

By way of preface, I wish to say that I have said but little bearing upon cerebral localization, citing only so much as seemed necessary to explain the symptoms manifested in the cases in point and give my reasons for the course pursued in its treatment, rather than display my extensive (?) knowledge (grabbed, of course, from the writings of others) of this feature of the subject. For when I wrote the paper my sole object was to relate in plain and simple language the principal facts, together with an account in detail, of the clinical manifestations of the case as were present at the outset and occurred from day to day subsequently, and to include, also, the treatment, in order that you, being in possession of all the material facts of the case, could draw your own conclusions as to whether the natural course was in any way modified by the treatment, how, and to what extent, and thus the paper be to us, as indicated by the title, "A Lesson in Hemiplegia."

In presenting this case to the society I am conscious of the fact that it is much too early (about nine weeks) to draw definite conclusions as to the permanency or otherwise of the present favorable indications; but since it is the most favorable, and even thus far has afforded more extended opportunities for study than any previous case of the kind I was ever called to attend, I shall present it according to my conception of its most salient features, and in all assertions touching prognosis I shall endeavor to hedge sufficiently to avoid future embarrassment.

H. T., aged 34, single; born and brought up on a farm; present occupation farming. On June 28th, 1895, about 6 P. M., while leisurely walking along, and without the slightest warning, he fell suddenly to the ground, and was almost instantly assisted to his feet by his brothers, who were with him, when it was noticed that his left arm and leg hung limp and helpless at his side. Unconsciousness, if present at all, was of almost momentary duration, for upon being asked what was the matter with him, he replied he did not know, and upon being shown a watch he told correctly the time it indicated. By the aid of a man at each side he walked, or rather hobbled, to the house, some few hundred feet distant, but had neither use or control of the affected limbs. I saw him about 8 P. M., and having been made acquainted with the above facts, I proceeded to make an examination of his person and noted the symptoms then present. He lay like a dead weight upon the back, but inclined slightly toward the left side. His breathing was slow and regular, no stertor or buccination, nor was there any froth on the lips. Eyes normal in every particular and appearance, except the axis of vision was directed quite sharply toward the right, although his position would thus cause him to look toward the wall of the room and away from his attendants. Protruding his tongue, it pointed toward left. When questioned he answered intelligently, but his understanding seemed slow, as though it required more time than ordinarily for him to comprehend what was said to him. His pulse was 72, temperature 98.2. Surface of the body bathed in warm perspiration, quite marked upon the face. There being no immediate alarming symptoms, I prescribed hy. mite. gr. j, sod. bicarb. gr. iij, every two hours for three doses, enjoined quiet and a limited liquid nourishment, and left him for the night.

* Read before the Loup Valley District Medical Society, September 8, 1896.

Digitized by Google

Saturday, June 29th, 3 P. M., but little change from last night; can slightly extend the toes of the affected foot, but cannot make the slightest movement with the upper extremity. Absence of bowel movement, I ordered the mild chloroid repeated, and in addition directed that he be given magnes. sulph. in dram doses every four hours.

June 30th, 10 A. M.—Not much change since yesterday. Bowels still constipated and no indication of moving. I gave an enema of six quarts of warm water, consuming over half an hour in giving it. A free fecal movement was the result, and from this time on there was but little difficulty in this particular. I was thus relieved of the apprehension that a part of the intestinal tract shared in the paralytic influence. This fear was not altogether groundless, for the patient had only partial control of the functions of the bladder for the first three days. At this visit, about forty hours from the attack, I decided to move him to the home of his father, a distance of about a quarter of a mile. He was placed horizontally on a bed in a spring wagon and the transit was slow. On arriving at his destination and being placed in bed he seemed weak and exhausted, and when asked as to how he felt he replied, "Very tired." Gave him hypodermically 1-60 gr. strych. sul. and directed that the same quantity be given by the mouth every hour until three doses were given. Saw him again at 5 P. M. and he had rallied nicely from the fatigue of the morning journey, but there was total absence of the power of motion in the affected limbs, and the lower half of the left side of the face was relaxed and expressionless, while the right side was contracted, with the angle of the mouth drawn slightly upwards. The eyes were still directed toward the right side, but the pupils were normal in appearance, responsive to the light, and there was little, if any, disturbance to the voluntary muscles of the appendages of the eyes. Sensation was not in the least impaired in any of the affected parts. I then placed him upon strych. sul. 1-32 gr. four times daily, directed that he be given nourishing food three times daily.

July 1st, 10 A. M.—Pulse 72, temperature 98.2. Eyes not so sharply directed toward the right, but the tongue is still deflected toward the left. Speech still slow and apparently difficult, but deglutition is but little, if any, affected. Treatment continued, and in addition he was put upon potas. iodid. grs. iv, in ess. pepsine, three times daily.

July 4th, 10 A. M.—Pulse and temperature normal; is in good spirits and has fair relish for his food. Increased the dose of strychnia to 1-20 gr. three times daily and directed that friction and massage be used upon the affected arm and leg three or four times daily, stroking in the direction of the venous circulation. At this visit it was noticed that with great effort he could slightly extend the great toe, but could not make the slightest perceptible movement with any part of the upper extremity.

July 8th.—Can extend the foot and slightly raise it from the bed, and can move the index finger a very little. I now commenced the use of faradism, using a small Florence battery employing a very mild current, using the poles interchangeably and continuing the sitting ten minutes, following with friction and massage. This was done twice daily and the time gradually lengthened until half hour sittings were given. There was marked improvement from day to day. By the 12th of July (two weeks from the attack) he could, when sitting in a chair, lift his foot from the floor to the seat of another chair. By the 16th he could stand, and with the aid of a cane could walk. Although at this time his gait was quite unsteady, he did not drag the toe of his affected foot as noticed in some forms of hemiplegia, but threw it forward, or rather inclined his body toward the sound side and thus caused the paralyzed leg to swing forward, pendulum-like. By the 24th he could pump a pail of water from an ordinary house pump, and could notice a manifest difference in the strength of the flexor and extensor muscles, the latter being the stronger and under much better control of the will. By August 2d he was able to ride to town, a distance of six miles, and come up a flight of steep stairs to my office. I then commenced the use of galvanism to the paralyzed limbs, using the poles interchangeably and employing only a mild current at first, not to exceed 20 m. a., slowly turning on the current until that strength was attained, allowing it to remain at that five minutes, then slowly turning it off. These sittings were gradually prolonged to twenty minutes, and always followed by massage and passive motion. At the third sitting a current of 5 m. a. was passed from front to back, interchangeably, through the right hemisphere of the brain, and lasting five minutes. Still later in the case the current was allowed to pass from the right side of the head to the left hand and foot, using a strength of 10 m. a. and five minutes' time. This treatment was given regularly once a week and he continued the use of faradism twice daily at home. He continued to improve; each time he came for a treatment I could observe a marked difference in his favor. He soon discarded his cane, could walk up and down stairs fairly well, has a pretty strong grip in his hand, can raise it above his head, and at present writing (September 8th, 1895) is still improving, and should our diagnosis prove not too wide of the mark, the prognosis may be deemed fairly favorable. Observe, I say fairly favorable, and I claim and am willing to place myself on record as saying that no stronger favorable prognosis is justifiable within so short a time, even in the most flatteringly favorable cases. There are many reasons for this view, the first being it is far too early in the progress of the case, as there may yet be developments, owing to the further cerebral changes,

Digitized by Google

which would cause us to modify our diagnosis. In the second place, the primary cause, which must exist in each and every case, may not only date far back for its origin, but may be continuous at the present. Furthermore, the system has suffered a shock which cannot be other than at greater or less expense to vital energy. These and other considerations must ever occupy an important place among the various data, upon the sum total of which we base our opinion.

In this case, and I consider it a most typical one, I grant there is ample room for difference of opinion as to the nature and location of the lesion, since cerebral hemorrhage and embolism have many points in common, and it is only by a process of reasoning, by exclusion and striking a balance, are we enabled to give a reason for our diagnosis. I do not think it will require any argument to prove that the seat of the lesion is cerebral, consequently I will exclude the cord. That it is in the right side of the brain needs no argument. The suddenness of the attack, its being purely motor in character, and affecting principally the left arm and leg, points quite positively to the right motor area of the brain for these parts, which, according to Horsely and Shafer (American Text-Book of Surgery, see cut), is that part of the brain embracing the upper two-thirds (description mine) of the fissure of Rolando, and bounded posteriorly by the intraparietal fissure and anteriorly by the precentral sulcus. Consequently the lesion, be it a brain clot, a thrombus, or an embolism, its field of operation must necessarily be in the artery or some of its branches which supply this region of the brain. This is the middle cerebral. But to be more exact, it cannot be the artery proper, but one or perhaps more of its branches; for the artery occupying, as it does, the fissure of Sylvius, an obstruction in this region would be attended with much graver symptoms than those we have. The deeper structures of the brain would be involved, and the basal ganglia being affected, we would have disturbance to some of the special senses, particularly that of vision and facial movements, together with mental aberration and muscular incordination, and while we could not expect aphasia from a lesion on the right side, we would most likely have in all subcortical lesions in this region disturbed speech and deglutition, none of which were manifest to any great degree, and were of such short duration that they may be attributed wholly to shock and purely reflex in character. Hence, my diagnosis is that the seat of the lesion is cortical, in the area above described, and due to embolism.

As to the source of the embolism, it is difficult to determine. The patient is a young man whose environment for his whole life has been such as to justify the opinion that it is most favorable to healthy development. His personal and family history are good, there being no evidence of any constitutional and no definite history of any acute disease. He says, however, that he has had two attacks of acute disease, the last one being some ten years ago, but the history is so vague and imperfect as to be of very little value to our present needs. A physical exploration of the lungs, heart, and blood vessels leading toward the brain, made July 4th, and another made at my office five weeks later, revealed nothing of importance. At the moment of the seizure he was not making any particular physical exertion, and it is not at all probable that there was any mental excitement, two reasons for excluding cerebral hemorrhage. The subsequent behavior of the symptoms is also against it, and there has not been the slightest indication of a recurrence, nor has there been anything to denote meningeal complications, both of which we most likely should have had, especially the latter.

Returning to the diagnosis of embolism, we can but concede that *a priori* there was a cause, and is it not probable that at some time, even in the distant past, the general nutrition had suffered sufficient to bring about changes favorable to the development of emboli? When we reflect that the animal body is but an aggregation of living cells, which are endowed with certain attributes and having specific functions to perform, each particular to its kind, and that the well-being of the animal depends upon the harmonious interaction of the different kinds of cells, it is not difficult to believe that in depraved or perverted nutrition, from whatever cause, lies the origin of many maladies which manifest themselves at remote periods, and that by a more careful and thorough study of these causes we may be able to trace a diathesis? If so, herein lies a wide and unexplored field of future usefulness and activity for the general practitioner. If we can solve the problem and thus secure to this class of prospective unfortunates the benefit of preventive medicine, we shall have not only added to our list another victory, but will, in a measure at least, be able to lessen the number of those who hitherto have been compelled to drag a shattered constitution with them to the end of their days.

But as this paper is already much longer than I intended, I will conclude by saying that in the treatment of this case I lay no claim to originality, and have no positive assertions to make as to how much the natural progress of the case is being influenced by it. I do claim, however, that, commensurate with our present knowledge of the nature of these lesions and the change to be wrought in bringing about a restoration to the normal, the course pursued is rational and in accord with our best authority. Furthermore, the apparent continuous improvement of the patient seems to justify the methods adopted.

Six months have elapsed since the above was written, and I am pleased to be able to report the improvement in the condition of the patient has been even more than I expected, although he is yet far from well. He worked continuously through haying and corn husking, making much

Digitized by Google

more than three-fourths of a hand. The treatment was continued about in the line described above, with this modification: I had him stop the iodid and strychnia for an interval of two weeks and then resume for a like period, and the galvanism was given during the last three months in much milder doses. Of his own accord, he ceased coming to my office for treatment January 17th, but I meet him quite frequently and to all appearance he is improving, and at no time has there been the slightest approach to a recurrence.

NOTE.—At present writing (November, 1896) there has been no material change in the case for the past nine months. The man has worked on the farm all the while, and his general health has been good.—AUTHOR.

A PLEA FOR MORE CONSERVATIVE MEDICINE AND SURGERY.*

BY REBECCA HANNA, M. D.,

RED OAK, IOWA.

The basis of medicine is physiology, and the basis of surgery is anatomy. In other words, let us make our patients as near like nature intended them to be as present conditions will permit.

Remove all the obstructions out of the way by making every secretion active and every anatomical relation correct, and supplying every needed material for repair to restore life and vigor.

This and preventive medicine is our work.

Too much medicine, too much surgery, is the other extreme from inactivity. The pendulum already begins to swing backward to a more rational point.

In our haste to relieve pain and impress our patients with our skill, we resort too early and too frequently to hypodermic medication or too much medicine by other methods. I can recall cases, simple in themselves, which have required several days to remove the untoward effects of such treatment, given or advised by a consultant.

Many accidents and deaths in obstetrics result from too great haste and from too active and frequent manipulations, manual and instrumental, on the part of the accoucheur.

There should be a reason for everything done for a parturient woman; whether to act, or not to act, is a question to be decided by the conditions present.

A disposition to aid nature and follow where she leads, instead of monopolizing nature's place, ofttimes would mitigate suffering and "save two citizens to Rome," instead of "one," as in the time of Cæsar.

Sometimes we can dispense with rapid dilation of the cervix for stenosis by the use of the mild faradic current once or twice a week, which prepares the way for treatment when indicated.

Ovarian and uterine disease which seem to demand an operation frequently may be successfully treated by local and internal medicine, electricity, with properly regulated general and sexual hygiene.

Five years ago I was called one hundred miles to see a woman whose youngest child was eleven months old. She could not stand or walk but a few minutes at a time, and sat on the floor or a lounge with her hands clasped about her knees, with thighs flexed on the abdomen, when not reclining.

Her husband sent her to me for treatment. One of our best surgeons saw her once with me in consultation. He gave a diagnosis of uterine cancer, with suppurative cystitis, possibly caused by calculi.

By general treatment overcame the chronic malarial poison in her system, washed out the bladder every morning for ten days with a sterilized boric solution and a free use of diuretics and cathartics until urine became normal, which before was composed of one-third pus, streaked with blood. With tonics containing strychnia, and local uterine treatment, continued three and one-half months, I sent her home cured.

She has remained well to the present time, while doing the work of a farmer's wife and in addition taking care of her apiary and chicken incubator, from which she realizes several hundred dollars a year.

Six years ago the late Dr. Byford, of Chicago, sent to me a patient of his who lived in my town, with a letter saying he wished her to be prepared by local treatment for an operation for lacerated cervix and lacerated perineum. After about three months I sent her back to Dr. Byford, who had previously agreed with the patient to perform the operation for $200.

After a careful examination he refused to operate, saying that he had not supposed that any treatment could have produced so good a result, and if she were a member of his own family he would advise the same. "You might not be as well after the operation as you are now. Return home and have your physician continue her treatment two months longer." I gave this added treatment and she has been a well woman ever since.

There are, no doubt, hundreds of women operated upon every year who are supposed to have ovarian cysts or suppurating tubes, when these organs are found in a healthy condition.

It is a grand act to seize a patient and save him from the jaws of death and restore him to his family by the skillful use of the knife in removing the vermiform appendix. But how many others have passed on to "The undiscovered country, from whose bourne no traveler returns," from false accusation of this same innocent appendage. I read the following quotation a short time ago in a medical journal:

"You say you don't know what's the matter with the man," said the young college graduate, "and I'm sure I don't. What'll we do?" "Do?"

* Read before the Missouri Valley Medical Society, Council Bluffs, Ia., September 17, 1896.

Digitized by Google

said the fashionable physician, firmly, "why, we'll operate on him for appendicitis, of course."

The use of anesthetics and antiseptics, the X ray, and various other aids, has contributed so much to surgery that the brilliant results have dazzled the eyes and fascinated the heart of the practitioner of medicine, and

He longs to be a surgeon,
And with the surgeons stand,
And tell of cases legion
Cured with scalpel in hand.

I consider laparotomy in the hands of the careful skillful surgeon of priceless value and one of the wonders of the present century. But I protest against its indiscriminate use and the mutilation of men and women by every physician who wishes to make prestige and a reputation for himself by doing a great operation.

I realize that there must be a beginning for all who would be successful in any undertaking, yet the good of the patient and the best endeavor of the physician and surgeon must be the foundation for honest work. You cannot make a great surgeon or a great medical practitioner out of all the material who may choose to enter a medical college.

The late Professor W. F. Peck, dean of the medical department of Iowa State University, used to say, "A surgeon is born, not made." He might as truthfully have said the same of a physician.

In the present condition of the world we note imperfection on every hand—deformity of body and mind and moral depravity. So long as this is true our best efforts will often prove unavailing, and many before the prime of life will go down to death.

The first right of a child is to be well-born, but to insure this right it is necessary for a previous preparation of a hundred years.

As physicians and scientists we know, and our knowledge is confirmed by word of holy writ, that "The iniquities of the fathers are visited upon the children unto the third and fourth generation." If this be true the converse is also true, that the good may be transmitted as an inheritance.

Perhaps the survival of the fittest is best, after all, and asexualization should be reserved for the imperfect, the insane, and the criminal, and the reproduction of the best only be permitted.

By applying certain rules and regulations for the improvement of the lower animals, notably the horse, we unite strength, intelligence, gentle disposition, beauty of form, grace of motion, and velocity of speed, making a combination which challenges the admiration of the world.

These laws, modified and emphasized by the superior intelligence which in man we call mind and soul, applied to the higher animals which we designate as men and women, would mould the bodies of human beings into the lovely counterparts of the mythical Venus and Apollo, and with minds and souls pure and noble, be suitable tenants for these beautiful temples.

ARE CHRONIC TROPICAL DIARRHEA AND AMEBIC DYSENTERY IDENTICAL?*

By O. GROTHAN, M. D.,
ST. PAUL, NEB.

In bringing this subject before you I am aware that the malady under discussion can scarcely be called indigenous to this part of the country, and hence of somewhat rare occurrence. Therefore, it may be well to state, in the way of semi-apology, that, should you ever meet with a case of the disease under consideration similar to the one that we have seen, much time and anxiety may be spared you by your attention having previously been attracted in this direction.

We have all, through medical literature, become somewhat familiar with diseased conditions common in the oriental and tropical countries known as hill diarrhea, white diarrhea, chronic tropical diarrhea, sprue, etc. Probably, though, few of us have been called upon to treat this imperfectly known process of disease.

On May 4th we were summoned to attend Mrs. S., 30 years of age, who had, eight months previously, returned from the vicinity of Shanghai, China, where she had been living four years. Her husband, a missionary, and child three years of age died from a dysenteric malady a short time previous to her return to this country. We learned that the patient had from time to time passed from the hands of several physicians, with now and then slight remissions in the severity of the symptoms. At this time we found the patient in bed in a very much debilitated condition—anemic, with the peculiar transparency of the skin and rather bright countenance characteristic of a few wasting diseases that are not associated with physical suffering. The temperature ranged between normal and 101 degrees, and the pulse from 90 to 120. The symptoms were those described by Dr. Crombie, characteristic of hill diarrhea—frequent morning stools of light clay color, at times containing a large amount of white, glary mucus of the consistency of the white of an egg. The symptoms had come on so gradually that she scarcely knew from what time she could date her trouble. It was chronic, almost, from origin, though the patient reported an acute attack at the very onset soon after arrival in this country. However, at the time we first saw patient severe gastric disturbances, with frequent vomiting, were manifest. She was unable to take and retain any nourishment, and food of all kinds so far recommended produced both gastric and enteric distress.

Upon looking up authorities on the subject we found considerable diversity of opinion as to the best treatment. Various views are given as to the cause of this disease. Dr. Cantile suggests that it may be due to absence of lime and earthy salts and deficiency in alkalies and alkaline earths in the drinking water from the hill

* Read before the Loup Valley Medical Society, Ord, Neb.

Digitized by Google

streams. A. P. Das, of the Chandney Hospital, India, suggests that malarial disturbances of the viscera, including the liver, produce absence of bile. Changes in the stomach and the chylopoietic system are etiological factors. On the whole, but little seems to be known for a certainty. So, also, with respect to treatment. Sodium bicarbonate with ipecac is recommended; likewise sodium salicylate, zinc oxide, and rhubarb are counted of value. Calomel, for its cholagogue action, stands high with some. As to direct intestinal medication, all are tolerably agreed on the efficacy of antiseptic, slightly astringent enemata. For this purpose silver nitrate, boric acid, zinc sulphate, and creolin stand at the head.

The patient was put upon quinine and small doses of calomel in capsules, and a mixture containing salicylate of bismuth, sodium bicarbonate, and chloroform in mucilage water, and silver nitrate enemata. This produced a temporary benefit, but in spite of all precautions in diet and hygiene the former condition soon returned. For two weeks the patient continued to fail, notwithstanding all rational modifications in the treatment. Creolin was substituted for silver nitrate enemata, and subgallate and subnitrate of bismuth powders given. At this time there was almost complete suppression of urine. Temperature rose to 102½ degrees and pulse varied between 130 and 155. Previous to this time the patient was put upon liquid diet. As milk was not tolerated, various broth preparations were suggested, but a very limited quantity could be taken. We then put her upon an exclusive diet of evaporated milk, as first recommended by Torn (see *Therapeutic Gazette*, May, 1895), which seemed to be tolerated much better than any article of nourishment so far exhibited.

The patient now seemed hopelessly moribund. It occurred to us that this might be a case of amebic dysentery, and accordingly a microscopic examination was made of some mucoid discharges. There was but little trouble in demonstrating the ameba upon the slightly heated stage of the microscope. The patient was then put upon salol and quinine sulphate of each grs. ijss, with minute doses of opium every two hours, and bismuth subnitrate grs. x three or four times daily. Slightly acid rectal enemata were administered twice a day, containing one-half to one dram of quinine in solution, to be retained as long as possible. Almost from the instant this treatment was instituted the improvement seemed marvelously rapid, considering the previous condition of the patient. She was able to be up in two weeks and out for a ride in three weeks after the beginning of this treatment.

Prof. Joseph B. Marvin, of Louisville, in a lecture upon dysentery in 1886, said: "Since we have learned to treat a certain class of dysenteric patients by large doses of quinine, much has been done to reduce the high mortality rate that formerly existed in this locality."

Of course we all know that Councilman's paper before the American Association of Physicians in 1892 has given us the most concise knowledge of this disease. As regards experimental investigation carried on in Johns Hopkins Hospital by Osler, Councilman, and Lafleur, we are to a great measure indebted for the rationale of the efficiency of the quinine treatment.

As a matter of speculation, it occurs to me that the so-called oriental diarrhea may be largely due to *amœbæ coli*, and if the quinine treatment were instituted before secondary pathological changes, such as abscess of the liver, had taken place, etc., might not the fearful mortality that now exists be reduced to a minimum? Kortulis and others have proved beyond a reasonable doubt that the *amœbæ coli* is the specific cause in many intestinal diseases, other than dysentery. Hence the apparent probability that tropical enteritis may often originate from this source.

SOMETHING ABOUT INSTRUMENTAL LABOR.*

By F. DAMOUR, M. D.,
BOLCKOW, MO.

The continual striving for something new and something better, if conducted in a proper spirit, is doubtless a laudable ambition. Great care, however, should be observed against too great a degree of enthusiasm, or, to use a common expression, against slopping over, and believing oneself altogether right and all others who may differ from us in opinion as altogether wrong. We find this to be the case in nearly all variety of subjects, in politics, religion, morality, and the sciences, that of medicine not being an exception. For instance, in obstetrics we find some doctors advising and urging the use of forceps on what may be termed slight indications, while others oppose it and advise against haste, lest more injury be done than good. Of course, either idea may be carried to an extreme. I am sorry to say that the eye is not always single for the best interests of the patient, but that too often selfish considerations are the motive power of actions.

A short time since, while glancing over a medical monthly of August, 1895, I noticed an article giving an account of three hundred and thirty-one lacerations of the perineum, with remarks, supposed to have been treated by one physician in a city the size of St. Louis, within six or seven years, all in one institution called a sanitarium. It does not state how these lacerations were produced, but the natural inference would be that a few might have happened by a neglect on the part of the physicians to give proper support to the perineum and child at the critical time. But doubtless a majority of the injuries must be attributed to meddlesome midwifery; by the too frequent, unnec-

* Read before the Medical Society of the Missouri Valley, Council Bluffs, Ia., September 17, 1896.

Digitized by Google

essary, or bunglesome use of the obstetrical forceps.

Are such things not subject to critical comment?

Such reports help to strengthen my conviction rgarding the colrrectness of the position or stand taken by myself in an article published in the *North American Medical Review*, of March, 1895, entitled "A Plea for Patience in Obstetric Practice." While I do not claim any originality in regard to the admonition, counsel, or advice, the examples given by way of illustration in that paper show conclusively that the use of instruments could frequently be dispensed with, and thereby much injury and hazard of injury avoided.

It may be, however, that forceps deliveries are not quite so distressingly numerous as might be inferred from some of the medical journal reports. I remember that several years ago a young physician of about two years' experience, in a small Kansas town having a population estimated at six hundred inhabitants, had a communication published in the Kansas City *Index* which purported to be a showing of his experience in numerous cases of instrumental labors. I do not remember the number which he claimed to have had, but know that the doctor's exaggeration was very much like the story told by a certain venerable deacon who was brought to task for unwarranted utterances against a brother member of the same flock. Being cornered, he acknowledged his guilt and expressed great sorrow over what he called his besetting sin by saying that he had already shed "barrels of tears" over this one great fault or mental infirmity of his. Using this as an illustration of the tendency of some physicians to "exaggerate," we may console ourselves with the belief that perhaps, after all, the obstetric forceps may not be such a very bad and wicked instrument, especially when in careful and skilled hands.

PROFESSOR HARE considers Basham's mixture the best preparation of iron, especially in renal diseases.

BYRON ROBINSON asserts that it is extremely rare for an adult to have a normal peritoneum, that is, free from peritonitis or its effects.

THERE is no antagonist to chloroform so valuable as strychnine given in full doses, and on the slightest sign of cardiac or respiratory failure.

THE QUACK AND THE PRESS.—The Ft. Dodge (Iowa) *Post* has come out openly and refuses to accept quack advertisements in its columns. It should be supported in every way by the profession in that part of the state, and it is to be hoped that this bold step will be followed by other journals, until the quack is extinguished. For, without the press the quack could not exist.

THE WESTERN MEDICAL REVIEW for a year for a dollar! Can you afford to be without it?

ULCERS OF THE CORNEA.*

BY J. W. BULLARD, M. D.,
PAWNEE CITY, NEB.

Ulcers of the cornea either develop from the surface, the epithelium being last, or from within, an infiltration forming and then undergoing ulceration. They are more cloudy when developed in the latter way. They are occasionally complicated with hypopyon and iritis. When not too deep the opaque base first clears, then the epithelium is regenerated, and we have "reparation ulcer," with a transparent, depressed, shining base, visible for a long time. (Schmidt-Rimpler.) If the ulcerating process extends deeply into the cornea, such favorable results do not follow, but the ulcer heals by the formation of opaque cicatricial tissue, which may remain on a level with the surrounding corneal tissue or even project above it, forming an ectatic corneal cicatrix, or may even amount to a true corneal staphyloma; or again, it may become flattened and lead to diminution or even phthisis of the cornea.

In the beginning period of recovery, of most deep ulcers at least, vessels are to be seen in the cornea extending from the sclero-corneal limbus to the ulcer, which soon begins to lose its dirty white or yellowish color. Should the ulcer extend more deeply and all but the posterior elastic membrane of the cornea,—the membrane of Descement,—be penetrated, the intraocular tension may bulge this forward, and we have a hernia of the cornea, or a keratocele. A cursory examination may not reveal this condition, owing to the extreme transparency of this membrane, and the difference in level from the healthy cornea having been effaced by the filling of the crater by the hernia. Focal illumination, however, will reveal the true condition. When this condition is present, rupture of this delicate membrane is likely to take place, and the iris to be incarcerated in the wound. This is a bad state of affairs. As these dangerously deep ulcers are prone to occur in cases of severe blenorrheic ophthalmia, there is great danger of the internal structures of the eye becoming infected. Blepharospasm is likely to be a marked feature in these cases, with its consequent increase of pressure.

A few months ago a severe case of purulent conjunctivitis was referred to me by a physician in a neighboring town. There was a great deal of chemosis and the eye was literally weeping pus. The iris was congested and a few drops of a four grain solution of atropia were instilled into the eye. A small ulcer was just beginning at the corneal margin. In twenty-four hours it had increased and was quite near the danger line. I admonished the patient to keep his hands away from his eye, as any increase of pressure might cause a rupture through the floor of the ulcer. A short time after leaving my office his eye itched,

* Read before the Gage County Medical Society, at Beatrice, Neb., July 24, 1896.

Digitized by Google

as he said; he put up his hand suddenly to rub it and struck it quite forcibly with his finger. A very severe ciliary neuralgia ensued,—which is quite sure to follow the sudden giving away of the floor of the ulcer. He did not report to me till next day, when I found the intraocular tension materially lessened and the relaxed iris caught in the wound, but strange to say intraocular infection did not take place.

The adhesion of the iris to the posterior surface of the cornea, constituting anterior synechia, while fraught with some danger to the future welfare of the eye, is not as dire in its results as was formerly supposed.

Etiology.—External injuries causing a loss of epithelium in the healthy eye are usually soon healed, and it is only in cases of blenorrhea of the lachrymal sac or disease of the conjunctiva, which cause infection of the abraded surface, that severe ulceration of the cornea is likely to occur.

In phlyctenular conjunctivitis, conjunctivitis of the aged, chronic conjunctivitis, and trachoma the ulcers are usually small, but the deep, dangerous ulcers are usually found in cases of purulent and diphtheritic ophthalmia. Affections of the lids, as entropion, ectropion, and trichiasis, also cause corneal ulceration. Previous corneal inflammation or abscesses are also causes of this disorder. Constitutional dyscrasias, especially struma, have their bearing as etiological factors.

Corneal ulceration may be divided into two general groups or classes: First, Simple or non-spreading, and second, the spreading, or more properly, infective ulcers. These two principal groups may be subdivided into many more, but as this paper is only intended to treat of the subject in a general way, the writer will not enter into a discussion of these minute subdivisions, which may be found by reference to any classical work on ophthalmology.

Symptomatology.—Generally speaking, the three cardinal subjective symptoms of corneal ulceration are photophobia, blepharospasm, and pain more or less pronounced. The dread of light is usually most prominent in children, and those of irritable and strumous diathesis. One case comes to my mind of a strumous child whose mother had died of tuberculosis and who was suffering from universal eczema. For three months she never voluntarily opened her eyes and it was necessary to use a general anesthetic in order to even examine the cornea or make any local application to the diseased eyes.

The superficial ulcers as a rule cause more photophobia than do the deeper and more serious ones. The symptom of photobhobia is so nearly pathognomonic that its presence should always lead to a careful examination of the cornea. The objective symptoms are congestion, and most important the presence of the ulcer. The congestion, as in iritis, is usually due to the distention of the subconjunctival twigs of the ciliary zone—the anterior ciliary vessels. In some forms of marginal ulceration only those vessels which are directly concerned in feeding the ulcer are distended, and then we find only a band of congestion radiating outward across the sclerotic from the cornea. Pain is sometimes very intense and occurs in and around the eye. It is quite common in the earlier stages of acute abscess and acute ulcers. This ciliary neuralgia sometimes manifests very peculiar periodic tendencies. I once knew a patient who for several successive nights had ciliary neuralgia which came on fifteen minutes before eleven o'clock and lasted just forty-five minutes, and then subsided as suddenly as it had begun. Came on again at fifteen minutes before one, lasted the same length of time, and repeated the same cycle at fifteen minutes before three o'clock. On one night there were five such cycles, at a quarter to nine, eleven, one, three, and five o'clock. Gentlemen, this story may seem somewhat fishy, but its authenticity is undoubted, I myself having been the patient.

Prognosis.—This depends on size, location, and depth of the ulcer, and the complicating disease. In superficial ulceration the resultant opacity clears up more and more in the course of years, and those which have developed in childhood may become almost entirely transparent. A deep ulcer which has undergone perforation and prolapse of the iris is sure to leave a permanent cicatrix.

Treatment.—No absolute plan can be laid down. In the simple ulcer, a solution of boracic acid to cleanse the conjunctival sac, and a properly applied pressure bandage, are usually all that is required. If, however, there is much irritation, some atropia drops may be used to give the eye more complete rest. Much pain and congestion calls for counter irritation to temple and brow. For this purpose the writer is in the habit of using a heavy coating of tincture of iodine. In most cases hot fomentations of some antiseptic fluid answer a good purpose. In cases of ulcer accompanying purulent conjunctivitis, however, it is sometimes advisable to use cold applications instead. In this class of cases the pressure bandage is not admissible, as it confines the septic secretion, and hinders the frequent irrigation which is necessary to keep the conjunctival sac cleansed. For this purpose we should use a saturated, sterile boracic acid solution, or, 1 in 5,000 to 10,000 of bichlorid of mercury. The conjunctiva of the everted lids should be brushed from once in two days to twice each day with a 1 to 5 per cent solution of nitrate of silver, which should be immediately washed off with a 1 per cent salt solution. This hastens the exfoliation of the broken down epithelial cells and mucous corpuscles, and acts as an antiseptic, inhibiting the rapid propagation of the irritating micro-organism, thereby lessening the poisonous secretion which is so deleterious in its effects. The treatment of these deep ulcers in cases of acute blenorrhea requires a great deal of judgment, and in fact it is at times impossible to predict what plan of treatment will yield the best

Digitized by Google

results. If the iris is sluggish and hyperemic, betokening beginning iritis, and the ulcer near the center of the cornea, the indication for atropia is quite clear, but if, however, the ulcer is marginal, which is so often the case, and there is danger of perforation, it is a grave question to decide. If the iris be not involved, in many cases eserine will be the better remedy to employ, as it increases the power of absorption by dilating the ciliary vessels, stops the migration of leucocytes, and seems to act locally on the ulcer. Its myotic action also holds the pupillary margin away from the ulcer. If the indication for the use of atropia seems quite well marked, it may be dropped in the eye at bed hour and the eserine used during the day—two drops of the following solution every two or three hours:

℞ Eserin. sulph. 015
Cocain. hydrochlorat. . . .25
Aquæ destillat. . . . . 30.
M.

Hot compresses can be used in conjunction if iritis threatens. If the ulcer spreads in spite of this treatment, it should be cauterized, and for this purpose the most available remedy,—one the action of which can be controlled to a nicety,—and one easy at hand, is chemically pure nitric acid. A piece of soft pine is whittled down to a point, dipped into the acid, and held till all the acid is dried into the stick. The eye having been cocainized, the edges of the ulcer are now touched with the stick. This cauterizes the edges of the ulcer, destroys the micro-organisms, and forms a barrier to their further innovation of the healthy tissue. This I think much superior to curetting the ulcer in an eye which is swarming with micro-organisms.

An ulcer in an uninfected eye may be curetted with benefit, but the application of the acid stick in this way is the simplest and most effectual way of destroying the specific character of an ulcer that I have tried, and I scarcely ever use anything else for this purpose. It may be used on all ulcers that need cauterization. I invariably use it in all cases of phlyctenular conjunctivitis, touching each individual phlyctenule, whether of cornea or sclerotic portion of conjunctiva. I have seen long standing ulcers of the cornea heal as if by magic after one application of the acid pencil.

If there is bulging of the floor of the ulcer and perforation threatens, it is advisable to anticipate this by doing a paracentesis, and the point of election is the floor of the ulcer. The cut across the full diameter of the ulcer, and known as Semische's cut, is not always necessary, the simple puncture of the bulging membrane usually being sufficient. This may be done with any small, sharp, sterile instrument. For this purpose I am usually in the habit of using a cataract knife. If, however, the ulcer occurs in a case of severe purulent conjunctivitis, there is much danger of infecting the internal structures if the ulcer be opened. In such cases it might be advisable to run the risk of spontaneous perforation, while vigorous measures are being used for the arrest of the secretion, and spread of the ulcer, rather than subject the eye to the danger of infection. These are the cases which require much judgment, experience, and skill in their management, and no inflexible rule can be laid down, though I think if there is imminent danger of perforation we will do well to make a paracentesis.

What shall we do if there is hernia of the iris? In the vast majority of hernias, occurring as they do in purulent cases, we will not excise the protruding part, but by frequent cleansing with antiseptic solutions, the cautious use of the pressure bandage, and the judicious application of the acid stick secure as good results and with less danger. This rule is not an absolute one, however. When the hernia is a large one, in some cases it will be better to excise, and in some very recent cases, replacing the prolapsed iris within the ball will be the safer practice. In many cases the cure will be hastened by attention to the general health of the patient. Patients who are run down and in whom there seems to be a malarial element are benefited by a course of quinine and a general tonic treatment. Those of strumous tendencies should be given syr. of the iodide of iron, cod liver oil, or syr. lacto-phosphate of lime. Where there has been much corneal infiltration, as in keratomalacia, much may be done after the ulcer has healed, to clear up the nebulous or even leucomatous cornea, by persistent massage. A small portion of an unguent composed of yellow oxide of mercury .06, to vaseline 4., is placed in the lower conjunctival cul-de-sac at bed-time and thoroughly rubbed through the lids for some time. In children the results of this procedure, well carried out over a sufficient length of time, are sometimes marvelous.

The Röntgen Rays in Surgical Diagnosis.—In the recent case of a child, 4 years of age, who swallowed an iron toy "jack-stone," which was lodged in the esophagus, it was found that the patient was too restless to permit the ordinary exposure to the X rays required to obtain a negative, and accordingly the fluorescent screen was substituted and the foreign body located between the clavicle and the second rib. Dr. A. C. Wood opened the child's stomach and succeeded in bringing down the jack-stone through the cardiac orifice by entangling it in the meshes of a skein of silk. This is the second case of this kind occurring recently at the Hospital of the University of Pennsylvania, the former operation having been performed by Professor J. William White. The condition of the bones of the foot in the condition known as metatarsalgia, or Morton's painful affection of the foot, was well shown in some radiophotographs exhibited by Dr. Thomas G. Morton, president of the Academy of Surgery, at the last meeting of this society.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$2 00
Single copies..... 20

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, NOVEMBER 14, 1896.

THE CAMPAIGN OF NINETY-SIX.

The campaign has ended. "The great campaign of 1896," as it will be known in the future, is a thing of the past, and a sigh of relief went up all over the country when it was over, no matter on which side one's sympathy were. It has been a campaign of terrible anxiety on the part of nearly every one, for a fear of something—no one knew just what—was afflicting one and all. Business was at a stand-still, in all branches alike, and even medical journalism felt its withering effects. Advertisers were chary, readers were anxious, too anxious to read anything but political papers. Medical journals, a large number at least, could not resist the temptation to have something to say on the all important questions of the hour. Some of them, the *Medical Brief* for instance, let everything else go editorially, and devoted the editorial space to saving the country. The *Brief* put in some decidedly pointed editorials for the cause of sound money. And while its editor is a democrat, he did not hesitate to urge the election of McKinley. Brother Love, of the *Medical Mirror*, also a democrat, apologized for doing so, but he evidently could not resist the temptation to let his readers know where he stood. He was at the Chicago convention, and here is what he says of it:

"Passion and emotionalism, and not reason and judgment, dominated it.

"Hysteria and fanaticism controlled it.

"Brains represented the minority: brashness and demagogery largely composed the majority.

"I never saw a bigger neurological clinic in my life.

"Like all victims of alienism, interminable talk was the chief and ever present symptom.

"From start to finish the left and right hypoglossal nerves of the chief spirits were under constant stimulus."

* * * * * * *

"A platform almost revolutionary in its character was adopted. Senator Hill, Governor Russell, Senator Vilas, and others, of the brainiest and most conservative wheel-horses were turned down and almost reviled.

"Dear old Father Bland, who was the logical free silver candidate, was thrown out, and the 'Boy Orator of the Platte' by a matchless piece of eloquence mesmerized the convention.

"He did it magnificently. I sat within six feet of him, directly in front, studied him well. As he walked up the aisle and the steps to the platform, I remarked to Governor Russell and the Hon. George F. Williams, of Massachusetts, that he was the boiled-down expression of Wilson Barrett, Edwin Booth, John McCullough, and Henry Ward Beecher, in appearance."

* * * * * * *

"It is to be regretted that money, wealth, possessions, and poverty are the chief issues of today. The evils of America have been and are an inordinate desire for wealth and position; surely it must be a dangerous thing to force this root of all evil (love of money--more money) into a political campaign. The place for such discussions is in legislative halls."

But now it is all over let us get down to business once more. If you are not very busy, sit down to your desk and see if you cannot think of something to write for your journal. And having saved the nation, see if you cannot tell your brother practitioners something that will enlighten them, and so aid them in saving the individual. Winter is a good time to think and write. If you know anything that will be well for others to know, let us hear from you. It will do you good, and at the same time will help others. Let us have a campaign of education, but substitute medicine for money, and pædiatrics for politics.

WHAT GOES INSANE?

In a recent number of the *Journal of the American Medical Association* Dr. Drake maintains that the mind never goes insane—only the brain. The author's attempt to divorce mind from brain, we think, will hardly be successful, as far as the average professional man is concerned. "Man," says the author, "is a triune being consisting of a material, a sensible, and an intellectual ego."

Without considering the material (?) ego, it will be pertinent to remark that while the older school of psychologists made an obscure and arbitrary distinction between sensation and intellect, modern thought prefers to consider the mind as a whole. There can be no reasoning without ideas and no ideas without sensation. Intellect is the concurrence of association in consciousness. To

Digitized by Google

the clinician or the psychologist, "mind is the sum total of mental processes experienced by an individual during his lifetime." (Titchener.) This is all they know of mind. What lies beyond or above belongs to metaphysics and is purely speculative. Such views are foreign to the physician, and, if adopted,—which they never will be,—would only be confusing. Would the author claim that one born blind has a normal mind? Yes, but an undeveloped brain. But the mind is that with which we think, but we cannot think without ideas. The congenitally blind have no correct ideas of color, hence cannot think, compare, and pass judgment as a normal mind on problems in which color is a factor.

This expert author on insanity says of mind, "Its habitat is unknown," but he says the brain is the "seat of consciousness." Can consciousness in any way be separated from mind? Consciousness is the *now* of mind, and if the brain is its seat, it is also the seat of the mind.

This theorist, skilled as he is in hair-splitting, would, we apprehend, hesitate to separate will from mind, yet physiologists have located many will centers. The will, independent of these centers, however interesting to the metaphysican, has no scientific or clinical importance.

The alienist cannot know the brain independent of the mind any more than the modern psychologist can know the mind independent of the brain, neither of whom will separate the mind from the brain in so far as not to consider the mind insane when certain centers of intellection are diseased to such an extent as not to perform their special function.

But as to the author's apparently strong points, —his metaphysical speculations. He says: "The mind of the new-born babe is equal to that of the full-grown adult." And again, "The mind does not develop or deteriorate," it is created perfect. Truly but little occasion here for the doctor. But one cannot conceive of all minds being absolutely perfect, unless they are exactly alike. For example, if one's mind be devoid of that perfect power of cognition—of logical sequences which is so manifest a characteristic of the author's, one should have great cause of grievance. But if all minds are exactly alike, how monotonous heaven will be. Should the author's views be adopted by the profession, heaven will seem a place so little to be desired that fewer physicians even than now will be seen at the Thursday evening prayer meeting.

No progress, no development of the mind in the hereafter? Is not this against all modern thought? Had this ontological speculator not tried to demolish the well-grounded doctrines of modern philosophy, but had attempted to show that there was a phase of mind beyond the phenomena,—in other words, if he had attempted an inquiry into Kant's noumena,—then we would have had no occasion to offer any protest.

JONATHAN HUTCHINSON.

The session of the International Congress of Dermatology recently held in London, England, was especially fortunate in having Mr. Jonathan Hutchinson to preside over it and to give one of his characteristic addresses which would, at any similar function, in itself be an event of interest to the medical world, he being probably the foremost living English surgeon. The late Sir James Paget, intellectually, easily outranked him, or, indeed, any other modern English medical man. However, even in Sir James' day Mr. Hutchinson was said to be the best "all round" man in London. He is eminent as a general surgeon, eminent as an eye surgeon, and we may say pre-eminent in skin diseases. But he is probably at his best as a pathologist. His prominence in so many fields at once marks him as a man of great attainments. It should be remembered, however, that in England it is customary for the general surgeon to be up in the special lines of work as well. Their longer period of preparation enables them to do this. Besides their four years of student life they work from eight to ten years, or longer, about the hospitals, preparing for various examinations required for admittance to learned societies, etc., meanwhile getting much experience,—all this before they come into any considerable private practice. But whether this accounts for it or not, there is less tendency to specialize there than with us, as is shown by the fact that on the staff of an eye hospital or a hospital for skin diseases many of the most prominent members are general surgeons. As an illustration of this point the fact may be mentioned that until comparatively recent times none but general surgeons were eligible to a place on the staff at Moorfields.

As was Sir James Paget so is Mr. Hutchinson, tall and rather plain, with strongly marked features. The former was the acknowledged orator of the English profession, and the latter only falls short of him. To have heard these two is to have heard those who represent the high-water mark of medical culture in England. Mr. Hutchinson is a kindly man, most considerate of others, and es-

Digitized by Google

pecially of strangers who may have been introduced to him. The scope and grasp of his intellect is shown in his ability to generalize. This highest of mental traits he possesses in a greater degree than any other English surgeon we can recall. Something of the vast number of facts which he has accumulated and his comprehension of their relations to one another is shown in his presidential address delivered before the congress, but we think not in such a marked way as in some of his former addresses. It is in his power of generalizing that he illustrates the greatest of Anglo-Saxon intellectual characteristics. The Germans, with their admirable mental traits of plodding industry and perseverance, may be more prolific in facts, but it is the English-speaking people who, from Newton to Darwin, have been most successful in deducing general laws. One cannot read Mr. Hutchinson's observations on pathology without being impressed with the bent of his mind in that direction, and this would entitle him to be considered great in medicine and great in the intellectual world. The congress could have had no more distinguished or worthy man to preside over it.

Notes and News.

Our "selected article" for last month should have been credited to the *Practitioner*, London.

The new editor of the *Medical Standard* is Dr. S. C. Stanton, formerly editor of the *Medical Recorder*.

Dr. Bransford Lewis, of St. Louis, was married to Miss Jennie Jaynes, of Sedalia, Mo., October 14th.

Mathew's *Medical Quarterly* will hereafter be known as *Mathew's Quarterly Journal of Rectal and Gastro-Intestinal Diseases.*

The New Zealand government has passed a law forbidding the landing in that country of persons suffering from tuberculosis.

Rush Medical College has nearly a thousand students this year. If all the other medical colleges in Chicago had as many, what an army of life-savers it would make.

An improvement has been made in the fever thermometer which prevents the patient from discovering the temperature. The scale is left off the thermometer and is placed on a case which fits over it.

Canada has twelve medical colleges, about two-thirds as many as Chicago has, and yet the Canadian physicians are complaining about the profession being over-crowded and about there being too many medical colleges.

In the whole of Russia, with a population of 110,000,000, there are only 18,344 qualified practitioners. This gives a ratio of one physician to about 6,000 inhabitants.

Mr. Thos. Bryant, the noted surgeon of Guy's Hospital, London, has been appointed surgeon to Queen Victoria, to fill the vacancy caused by the death of Sir John Ericsen.

The profession of New Zealand have the disease, too. A bill has been introduced in the legislature of that country raising the period of medical study to five years. It will probably pass.

Pellotine, an active principle obtained from a Mexican cactus, is one of the latest hypnotics. The hydrochlorate is used in doses of four to six centigrams, either by the mouth or hypodermically.

Dr. Tanner, who gained notoriety by living forty days and forty nights on nothing but good fresh air, died at Akron, Ohio, on October 21st. He was burned to death in a conflagration in that city.

Nebraska's representatives to the Pan-American Medical Congress, which meets in the City of Mexico on the 16th of this month, are: Drs. A. F. Jonas and D. C. Bryant, Omaha; Dr. Warren H. Slabaugh, South Omaha, and Dr. H. B. Lowry, Lincoln.

"Buttonitis" is the name given to it by one of our contemporaries We all had it bad, but thank heaven it is over with now and we hope it will never break out again, at least in such a virulent form.

The Nebraska State Board of Health is having more than its share of bogus diplomas to worry over. This month the "Illinois Health University" had the honor of being represented by one of its victims.

Pyrantin is a new antipyretic. It is obtained by melting together hydrochlorate of phenacetin and succinic acid. It is extracted with boiling alcohol, from which it crystallizes in colorless prismatic needles.

Dr. Howard Kelly, the well known professor of gynecology in Johns Hopkins University of Baltimore, is reported to have given up work for a year, and is rusticating and recuperating in the west. It is the same old story: too much ambition, and too much mental and physical work, and the resulting breakdown.

According to the Cincinnati *Lancet-Clinic*, the medical schools of the United States number about 175. Of these 120 are regular, 19 homeopathic, 7 eclectic, 2 physio-medical, and 12 unclassified. Eight are for women specially, five of these being regular, two homeopathic, and one eclectic. In eight of the other colleges women are permitted to matriculate, and four are exclusively for colored people.

Digitized by Google

Dr. Austin Flint, of New York City, seriously injured his knee on October 28th while riding a bicycle. Dr. Harold N. Moyer, of Chicago, editor of *Medicine*, also got the worst of it in wrestling with a wheel recently, and got a fractured limb as a result.

Cremation is evidently becoming popular in England. The bodies of three noted men were cremated at Woking, England, last month, being those of Mr. George Du Maurier, Dr. J. L. H. Langdon Down, and Surgeon-General Sir William George Moore.

Dr. Laubenburg says that if a spot is touched with fuming nitric acid, and then immediately afterward with pure liquid carbolic acid, there is a strong chemical action, the effects of which penetrate deep into the tissues and completely and permanently cure warts, condyloma, etc.

Among those elected to the senate in Nebraska this year we noticed the names of Dr. J. B. Conaway, of York; Dr. O. Grothan, of St. Paul, and Dr. Edward Watson, of Friend. "There are others" who did not get elected, for some unexplained reason, and again there are some whose names we have not learned, who were elected.

Dr. W. B. Ely, of Ainsworth, called on us and said that he was one of those who "got left" in the late race for office, in this instance the senate. The doctor's field covered sixteen thousand square miles, and he says that he shook hands with every voter and kissed two-thirds of the babies in his district, and in spite of this, and his persuasive talks, and his good looks, he was beaten.

The "Divine Healer," August Schlatter, is getting down to business again. He has been arousing the dormant unbelievers of Philadelphia to such an extent that the handkerchief sales were on a boom, and there was a serious doubt in the minds of the faculties of the medical colleges there whether or not he would use up all their clinical material. Before he had made much of an inroad on the hospital business, however, he slipped over to New York and is now there trying to ruin the vocation of all the great and good medicine men of that city. At last reports the various clinics were still running.

Professor Benedickt, of Vienna, has been experimenting with the Röntgen ray as a means of examining the movements of the heart. He finds that a bloodless heart is transparent to a certain extent, but that thin layers of blood casts a deep shadow. During the systole the apex of the heart approaches the base; there is only a systolic lateral apex impulse. During each systole the heart is not entirely emptied, for a shadow due to residual blood is recognizable. During deep inspiration the heart is drawn away from the diaphragm, for a transparent interspace appears. The experiments succeed in young or emaciated persons, and the examinations have no deleterious effects if they are not too frequent.

Our exposure of the National Homeopathic Medical College last month evidently did some good. It showed up the college in such a light that the Illinois State Board of Health has refused to recognize it. Our editorial on the subject has been copied in several papers. Elsewhere will be found resolutions adopted by the Illinois board in reference to what it thinks ought to be done in the way of legislation.

It is said that some of the larger life insurance companies are discussing the advisability of establishing a sanitarium for consumptives in some locality where the surroundings and climate will conduce to the prolongation of life and to the cure of the patient. This proposition was made by Dr. Denison, of Denver, some years ago. Whether such a scheme would pay the companies is doubtful, and whether the companies would enter upon such an experiment is still more doubtful.

Our "Boy Orator of Lincoln,"—he lives several miles from the Platte, although it would be still better to call him the "Boy Orator of Salt Creek,"—has taught one lesson in this campaign that medical men might do well to learn. Mr. Bryan traveled something like 15,000 miles and made 599 speeches, in four months, and that without touching liquor. And he looks and feels as well to-day—physically at least—as he did the day he started for the Chicago convention. A good lesson in temperance surely.

Society Proceedings.

The American Association of Obstetricians and Gynecologists, at its ninth annual meeting held at Richmond, Va., elected the following named officers for the ensuing year: President, James F. W. Ross, M. D., Toronto; vice-presidents, George Ben Johnston, M. D., Richmond, and John C. Sexton, M. D., Rushville, Ind.; secretary, William Warren Potter, M. D., Buffalo; treasurer, Xavier O. Werder, M. D., Pittsburgh. Executive council: Charles A. L. Reed, M. D., Cincinnati; Lewis S. McMurtry, M. D., Louisville; A. Vandeer Veer, M. D., Albany; J. Henry Carstens, M. D., Detroit, and William E. B. Davis, M. D., Birmingham. The next annual meeting was appointed to be held at the Cataract House, Niagara Falls, N. Y., Tuesday, Wednesday, Thursday, and Friday, August 17th, 18th, 19th, and 20th, 1897.

Cedar County Medical Society.—The first regular meeeting of the Cedar County Medical Society was called to order at 1:30 P. M. in the office of Drs. Miller & Dales, Randolph, Neb., October 13, 1896, by President Wilson, of Hartington. Members present: President Wilson, Hartington; Dr. Hamilton, Coleridge; Dr. Dales and Dr. Miller, Randolph. Visitor: Dr. F. C. Genung, Wausa.

A. F. Miller was elected secretary *pro tem.*

Dr. L. J. Townsend's resignation as secretary

Digitized by Google

was presented and accepted, and Dr. J. A. Dales was elected secretary.

Dr. F. C. Genung, of Wausa, was then elected to membership in the society.

Moved and carried that the Western Medical Review, published at Lincoln, Neb., be the official organ of this society, and all proceedings of the society be reported to that journal by the secretary.

Moved and carried that there be an honorary list of members of this society, and that said members shall consist of dentists licensed to practice dentistry in the state of Nebraska.

C. E. Walden, dentist, Randolph, Neb., and F. C. Prettiman, D. D. S., Hartington, Neb., were then elected as honorary members of the society.

President Wilson extended an invitation to the society to meet at Hartington for the next regular session, January 5, 1897. The invitation was unanimously accepted. (There are four meetings per year—the second Tuesday of the month—January, April, July, and October.)

Adjourned. A. F. Miller,
Secretary Pro Tem.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Twenty-second Annual Meeting, Held at the Minnesota State Capitol, St. Paul, September 15, 16, 17, and 18, 1896.

[Concluded from October number.]

Dr. Hugh T. Patrick, of Chicago, read a paper on "Electro-Diagnosis and Electro-Therapeutics Simplified." Electro-diagnosis is limited to the affirmation or denial of a lesion of the lower neuron; that is, of a lesion of the motor cells in the spinal cord, or of the nerve fiber, the peripheral nerves springing from those cells. A lesion of this neuron causes the action of degeneration, and this, stripped of all unnecessary technicalities, may be recognized by two variations from the normal, namely a loss or very considerable diminution of faradic contractions, and the slow, wormlike contraction of the muscles to interruption of the galvanic current.

In the electro-therapeutics of organic disease of the nervous system, applications of electricity through the brain may be entirely discarded as useless. Electricity through the spinal cord is little better. In diseases of the peripheral nerves it probably hastens recovery, and that current is to be chosen which the better causes muscular contraction.

In functional nervous disease electricity is of more practical value than in organic affections, but it is almost impossible to determine what proportion of this good effect is due to mental impression—to suggestion.

The galvanic current is chosen for facial neuralgia, costal and sciatica. The faradic for lumbago, hysterical anesthesia, paralysis, and pain. The galvanic for exophthalmic goitre and sometimes for neurasthenic headache and backache. For facial spasms, tic, spasmodic torticollis, tremor, and chorea, electricity is useful aside from the mental effect.

The highly practical and otherwise unusual merits of the paper were touched upon in the discussion which followed, all agreeing in the verdict that the subject of electricity had been presented in a most practical as well as scholarly form by Dr. Patrick.

Drs. Larrabee, Hughes, Manley, and Stuckey participated in the discussion.

Dr. J. Frank, of Chicago, read a paper on the subject of "A New Method of Fastening the Round Ligament in Alexander's Operation, with Little Disturbance of Its Anatomical Relations."

An incision an inch long is made midway between the anterior superior spine of the ilium and the spine of the pubes, a trifle above Roupart's ligament. The transversalis muscle is pushed back and the ligament lifted out with a blunt hook, such as I here show you. Draw it out until the uterus is in the correct position. No great difference is experienced if the peritoneal cavity should be opened. Usually three sutures are required to close the wound, the first one being taken as low as possible through one flap of the peritoneum, then through the round ligament itself. Instead of drawing the ligament through the fascia, as formerly practiced, it is replaced in its anatomical position beneath the transversalis muscle. By this method a slough of the ligament is prevented. This operation is the simplest of all yet proposed for the purpose. As a suture material, kangaroo tendon has proven most satisfactory in my experience. A pessary should be fitted in before the operation, and worn as long as may be deemed necessary by the surgeon, afterwards.

Dr. A. J. Ochsner, of Chicago: Dr. Frank devised this method seven years ago. I consider it a great improvement in this operation, because it does away with tearing and injuring the tissues. His method leaves the organ in the best possible condition for recovery, with sufficient adhesions to protect the ligament from being drawn out again; yet without unnecessary adhesions. I have examined some of the author's cases and can confirm his favorable report.

Dr. J. Homer Coulter, of Chicago, read a paper on "Tonsillotomy by Cautery Dissection." No subject in surgery or medicine has been much more prolific in interest and discussion than that of the tonsil. In the past ten years over 600 papers have been written on that subject alone. The size of the normal tonsil is still a subject of discussion with throat specialists. Some claim there is normally no tonsil to be seen; however, the most usual opinion is that there exists normally a collection of follicles between the pillars of the fauces, protruding slightly above them. The tonsil is an almond-shaped gland, larger at one end than the other and somewhat flattened.

Digitized by Google

The methods usually employed for its ablation are the guillotine, igni puncture, the cold or cautery snare, or the knife. Each of these methods have practical objections to their use. Most important of these objections, and one which applies to all of them, is the fact that by no one of them can the gland be taken out. Unless this is done the part remaining will oftentimes produce as much trouble as did the former condition. The operation I propose obviates this objection entirely if properly performed.

With a well-heated small electrode the pillars are dissected away from the tonsil to one-half its extent. The gland is then, with suitable forceps, drawn well out and thoroughly and entirely dissected out to about one-half its extent. This portion is then cut off and the surface treated with a strong solution of silver nitrate. In a week or ten days the other portion of the tonsil is removed in the same manner. This operation will give cosmetic as well as practical results unobtainable by any other process yet suggested.

"The Surgical Treatment of Pyloric Obstructions," was the title of a paper read by Dr. W. J. Mayo, of Rochester, Minn. This subject has not received the attention it demands from American surgeons. The differential diagnosis of serious pyloric disease is often a matter of the greatest difficulty. I have found the free exhibition of strychnia for several days previous to the operation of great value in preventing shock. The stomach should always be thoroughly washed out a few hours before the operation and nothing eaten afterwards. For combating the shock, besides strychnia and dry heat, a rectal enema of a pint of hot coffee should be given. Nourishment by the stomach should not be too long withheld afterwards. For twenty-four hours rectal alimentation should be used; in thirty-six hours some champagne, later buttermilk, and a gradually increasing diet.

Dr. A. F. House, of Cleveland, opposed the use of the Murphy button and did not consider it the ideal method, as his experience had been somewhat unsatisfactory. I believe the less foreign matter one gets in the wound in uniting the bowel to the stomach, the better the result. I have discarded the button for the suture method. I believe much of the success in the use of the button depends on the skillful technique in using it. Perhaps I do not possess this skill.

Dr. F. F. Lawrence, of Columbus: In case of malignant disease we cannot promise more than temporary relief, and perhaps prolongation of life for a brief period. The simpler the operation the better for the patient. I doubt very much if resection in case of malignancy will give a permanent cure.

Dr. A. J. Ochsner: I should like to take away some of the good impressions the author has left regarding the hydrochloric acid test. I am convinced it is a most treacherous test. In suspected carcinoma the best thing to do is to make a colostomy. In some twenty cases I have used irrigation of the stomach with decided satisfaction. In this way the patient will sometimes become well enough nourished to better stand an operation when it is desirable.

Dr. Thomas H. Manley, of New York, read a paper on "Conditions Which May Simulate Organic Obstruction of the Rectum." The author gave an extended, most interesting, and practical paper, putting new life and interest into the somewhat hackneyed, though none the less valuable, subject of constipation.

Dr. Norval H. Pierce, of Chicago, read a paper on "Submucous Linear Cauterization; a New Method for Reduction of Hypertrophies of the Conchæ." The author called attention to the various methods ordinarily used for the reduction of such hypertrophies, and showed the disadvantages of such. The differentiation between hypertrophy and turgesence was pointed out. The operation proposed by the author was as follows: A small incision is made in the hypertrophied membrane, then with a blunt flat probe the mucous membrane is carefully separated from the erectile tissue underneath. Then a sound, the end of which is cup-shaped, and upon which has been fused a few crystals of chromic acid, is inserted in the incision and the track already made by the probe is thus cauterized. The advantages of this method are that there is no hemorrhage. It is less painful than by any other method. The functional activity of the mucous membrane is not in the least impaired. Patients will submit to this operation more willingly than to the burning of the cautery. The method is the most simple of any yet suggested. The reaction is usually insignificant. There is no slough. The danger of atresia is obviated.

Dr. Horace H. Grant, of Louisville, delivered the address on surgery. He selected for his subject "The Relationship of Diagnosis to the Future Surgical Progress." Some common ground must be chosen on which we can equalize our differences. Many of the most recent operations are already passing away under the effect of our modern scrutinizing investigation. We forget there are men in the quiet of their laboratories doing a work which makes all our wonderful progress possible and gives us these new methods. We cannot progress much farther in technique or operative skill. Any great amount of paraphernalia suggests a lack of personal resources in the operator. Almost every part and organ of the human body has been removed, recently, with more or less good to the patient. If we would make earlier and more careful diagnoses many of the possible failures would be precluded. No surgeon dare say to the patient, "If I had known yesterday or before, thus and so, the result would have been different." Are we not at fault sometimes ourselves? Rarely will we fail to secure an operation if the operator be

Digitized by Google

certain of his diagnosis and demands the operation.

No term in all surgery is so often misapplied as conservatism. No aim is dearer to the surgeon than the ways and means of relieving his patient. We must not fall into the error of making one man great and another insignificant. The experience which age gives some men leads them to make valuable and correct diagnoses. Experience is, and should be, one of the greatest aids in diagnosis.

The skiagraph has lately come into importance in surgical work, and it may be made an excellent adjunct in many instances. Its recent successes are noteworthy. It is yet, however, in its infancy, and doubtless is capable of still more development. May we not soon expect to see the fetus *in utero?* No one doorway can open to the royal road to success in the practice of surgery. The skillful and intelligent application of prompt relief, added to a careful diagnosis, will give us the most wonderful and satisfactory results.

What each one finds to do, let him do it with his might.

An unanimous vote of thanks was extended to Dr. Grant for his scholarly and interesting address.

Dr. James H. Dunn, of Minneapolis, read a peper on "Appendicitis: To Operate or Not to Operate." If we could but foretell which of our cases were going to be fatal, we could much more easily and satisfactorily decide this question. The percentage of fatality is yet too high. Yet must we cease operating because of such fact? A certain number of these cases will recover without surgical interference. Indeed, there is so large a number of such that I believe we very often, in our enthusiasm, operate when it would have been much better to have left them alone, so far as the knife was concerned.

Dr. J. B. Murphy, of Chicago: The surgeon is brought face to face with a condition which has a recognized mortality of about five to eight per cent. I think such a percentage is too high. We first have to contend with the presence or absence of a suppuration. In 450 cases I do not think there has been an entire absence of pus in one single instance. I am satisfied there are some cases which can be cured by medicine, but can they be differentiated? By medical treatment we have a mortality of ten per cent, and if we have three per cent by the knife, then we must operate to save the other seven per cent. I don't think every case can be operated upon, but the conditions will show whether or not it is advisable.

The next paper was that by Dr. Gustave Futterer, of Chicago, on "Pleuritic Effusions and Their Treatment." A bacteriological examination should be made in all cases; both with cover glasses, with culture media, and by injections of the effusion in animals. Distinguish between exudate and transudate by using the acetic acid chemical test; and by the same process eliminate mucine. Many cases of pleurisy are of an uric acid diathesis. These will yield readily to the treatment by the salicylates. I believe not more than fifteen per cent of pleuritic cases are rheumatic. The finding of pneumococci does not aggravate the conditions, and often gives no markedly distinct symptoms. Pleurisy in typhoid is not a mixed infection, but a distinct condition. Tubercle bacilli are often found in the pleuritic effusions. I believe it is not only possible, but likely that the tubercle bacilli do penetrate through the alveolar septi and enter the pleura without producing infection in the lungs. Tuberculosis may be differentiated by the agar culture. Hyperesthesia of different parts is frequently present. I have washed out the cavity in fourteen cases with an antiseptic solution of one-half to two per cent of clove oil, with most gratifying results in twelve of the cases. The advantages of this method are: Many patients will allow such an operation who would object to an exsection of the rib; no bulky dressings are constantly interfering with the comfort and convenience of both patient and physician; much shorter time is required.

Dr. A. J. Ochsner, of Chicago, read a paper on "Nerve Sutures and Other Operations for Injuries to the Nerves of the Upper Extremity." My own observations and a study of the literature lead me to a confirmation of the following conclusions:

1. Every severed nerve should be sutured, even after years.
2. The earlier the operation is performed the better.
3. If neither sensation or motion is established within a year, the nerve should again be exposed, the cicatricial tissue removed, and the end again sutured.
4. The end should be clean cut, should contain neither crushed tissue nor cicatricial tissue.
5. Tension must be avoided.
6. The wound must heal without suppuration to secure the best results.
7. Hemorrhage should be perfectly controlled to prevent intervening clot.
8. Carefully prepared catgut is the best suture material.
9. After suturing the ends either direct or "a distance," it is well to stitch a fold of fascia over the united nerve ends.
10. The extremity should be placed at rest.
11. The external incision should be ample.

Dr. Henry P. Newman, of Chicago, read a paper on "Woman and Her Diseases vs. Gynecology." We are coming to a period of transition in the practice of surgical studies on the cure and prevention. Preventive medicine, hygiene, sanitation, and sociology are now popular themes for medical societies. Philanthropy has taken the cue from medicine, and is attempting to form a citizen rather than reform him. I wish to emphasize the fact that we are not dealing with the cold science side of our art, but with the highest of humane interests. The amount of ignorance in the

Digitized by Google

average woman of nature's requirements is appalling. Woman's sphere has lately widened until now it is as wide as man's. Has she equipped herself for this race intelligently? Look at the average woman in the cities; the average stenographer, saleswoman, the business woman, do they not daily outrage their bodies by compliance with the dictates of fashion in food, dress, and habits?

The tendency of gynecologists to enter surgery is to be deprecated. It narrows his opportunities. He had better stay attached to obstetrics and pediatrics. A woman's generative organs should not be doomed because she has needed to visit the gynecologist. A good diagnostician must know as much about women as about disease; as much about environment and social and domestic relations as about pelvic lesions.

As specialists we must recognize and exercise the important interests in a medical science which still prevent, rather than cure, disease. As we know what can be acquired may be prevented, hence we as specialists should lead in the reform of those conditions which are detrimental to the health of woman.

"The Pathology and Treatment of Suppurative Salpingitis," was the title of a paper read by Dr. F. F. Lawrence.

The tubal mucosa is a true mucous membrane, possessed of all the histological elements of mucous membrane. The fimbriæ are prolongations of the folds of mucous membrane, with a few muscular fibers beyond the end of the tube.

The closure of the end of the tube is effected by —first, the unfolding of these plicæ and the elongation of the muscular fibers, with coincident inflammatory exudate, and not by adhesions of the peritoneal surface. Second, the formation of adhesions between the fimbriæ and other structures. Third, embedding of the fimbriæ in inflammatory exudate.

The closure of tubal ostea results in forming of circumscribed abscess; the pathology of which is the same as that of suppuration, with abscess formations, in mucous membrane in other parts of the body, except for its effect upon important contiguous tissues. Occasionally the uterine end of the tube, communicating with the uterine cavity, through which it may in part discharge its contents.

Treatment.—The treatment of pus tubes cannot be fixed by any ironclad rule. Each case must be treated according to the conditions there presented. We must even incise and drain in some cases. Seldom will vaginal section be required, and only in carefully selected cases. Hysterectomy is indicated in those cases where we find abscess of the uterine wall, tuberculous deposits, fibroids, or malignant disease in the fundus. As hysterectomy destroys the pelvic floor, it should never be performed except where there is some tangible lesion of the uterus. Abdominal section will be necessary in many cases.

"On the Importance of Physical Signs Other Than Murmur in the Diagnosis of Valvular Disease of the Heart," was the title of a paper contributed by Dr. James B. Herrick, Chicago.

Standard text-books teach that an endocardial murmur is not always an evidence of a valvular lesion, and also that a valvular defect may exist and still no murmur be present. Practically, however, conclusions are usually based upon the presence or absence of murmur. This is wrong, for there may be a valvular disease without a distinct murmur being audible. Other findings than murmur must be used in determining the existence of a valvular lesion. Every valvular lesion must result in hypertrophy and dilatation of the heart behind the valve diseased. An increase in tension of the pulmonary circulation follows any valvular lesion at the mitral orifice, and later any aortic disease. This will show in increased force of the pumonic second tone.

Stenosis of the orifices of the left heart means a smaller amount of blood in the general arterial circulation, therefore, lessened arterial tension.

Failure of the right heart is followed by venous congestion, *e. g.*, venous pulse, hepatic and portal congestion, anasarca, etc.

Hypertrophy may be recognized by the heaving, forcible apex impulse. Epigastric pulsation may call attention to enlarged right heart. The jugular pulse, the hepatic and capillary pulse, are all of diagnostic value. The visible pulse or aortic regurgitation is almost pathognomonic.

Palpation is important. Extra-cardiac causes for murmur, such as might arise in a heart dislocated by pressure or retraction, can usually be excluded by percussion.

A weak aortic sound may be an indication of obstruction. The reduplicated second sound may point to valvular disease. A sharply accentuated first sound at the apex is common in mitral stenosis. The peripheral tones in aortic regurgitation are a valuable confirmation.

Cases illustrating the foregoing were referred to.

Error in calling an inorganic murmur organic is readily made unless the secondary sounds are carefully sought for. The intention of the paper was not to undervalue the importance of endocardial murmur, but to insist that it is only by the complexus of signs and symptoms that an accurate diagnosis can be made. Of all the evidences of heart disease, the least valuable is the endocardial murmur.

Dr. R. H. Babcock, of Chicago, read a paper entitled "A Report of a Case Illustrating the Value of Secondary Physical Signs in the Diagnosis of Cardiac Diseases." Among other points brought out were: Murmurs are the least reliable signs of valvular disease. An accurate diagnosis cannot be made unless the secondary signs of valvular disease are recognized. If the heart actions are not sufficiently strong there may not be any murmur; or a grave defect may not be observed for the same reasons. Secondary symptoms are a modified pulse rate, character and rhythm, leading

Digitized by Google

to a congestion of the veins and internal organs. In some instances there is also systolic venous pulsation of the liver. Such systolic jugular pulsation is diagnostic of insufficiency, even if the murmur is not audible.

Dr. I. N. Love, of St. Louis, read a paper entitled "Water." Drugs, drugs, drugs, seemed to be the chief inspiration in the life work of too many men. Hydropathy has been a wonderful service to humanity. We can appreciate the necessity of water when we remember that seventy-five per cent of our body is made up of water. It is just as important as the solids in life's conditions. The demands for water are affected by the amount of muscular exercise and degree of temperature to which the body is exposed. For an irritated stomach or bilious colic nothing is superior to liberal quantities of hot water. For "a night out" two or three cups of hot water along with a cup or two of hot coffee nothing is superior. It soothes the nervous system if you will abstain from food a few hours.

We need water for nutrition, but also as well, and more important, for a proper elimination. Water taken freely acts as a purifier of the system, both by flushing and by its solvent action. The majority of people drink too little water. I would highly advise training children to drink more water. It is a most important agent in improving the complexion. Medicine should be given in large quantities of water. In typhoid fever I insist upon free drinking of pure water. No solvent will act better in removing uric acid from the system, and the only pure water is distilled water.

Copious draughts of water for its stimulating effect or the reduction of temperature has been used many years. The hot pack in convulsions of children is often misused. Better begin with a tepid heat and add cold water gradually. Hot water locally in inflammatory conditions is most excellent.

Dr. Isaac A. Abt, of Chicago, read a paper, "The Clinical Significance of the Child's Fontanelle." In health the fontanelle does not sink below or rise above its bony frame. It has both respiratory and pulsatory movements. With increased intracranial pressure and normal bruit may quite disappear. An early ossification interferes with brain development and produces a brachycephalic skull. In rachitis the involution of the fontanelle is delayed. Marked bulging is caused by the collection of fluid within. The abnormal retraction of the fontanelle always indicates a condition of inanition. It may be temporary; if chronic it is a serious condition. A deeply sunken fontanelle is always a danger signal in any case. Involution occurs normally at fifteen to eighteen months. Protuberance and tension indicate meningitis.

"Operative Treatment of Pterygium," was the title of a paper read by Dr. Eduard Boeckman, of St. Paul. The author discussed the history of the operations for the cure of pterygium; pointing out the objections as well as the advantages of those most frequently used. He suggested an operation which was a combination of some others referred to. A crescentric piece is cut from the pterygium about five lines from its head. This part is curetted thoroughly down to the sclerotic. The head of the pterygium is dissected off. At the convexity of the piece cut out a stitch is inserted and the opposing edges drawn together. This leaves the curetted portion to granulate and form a cicatrix. The author thinks the results from this method superior to that of any other in his experience. The paper was discussed by Drs. Wilder and Buckner.

Dr. William H. Wilder, of Chicago, read a paper on "Subconjunctival Injection in the Treatment of Certain Diseases of the Eye." The method consists in the injection beneath the conjunctiva of minute quantities of bichloride of mercury or cyanide of mercury in solution. The operation is not especially painful unless there be inflammation present. It has been advocated for many other conditions and diseases. Its exact limitations and indications are not yet positively decided upon. It has been impossible to get the same good results from the salt injections that can be obtained from the mercury. We have in this new treatment a powerful adjunct to the old and tried methods in some diseases of the eye. It is not to be employed to the exclusion of all others. It is not a panacea, but in indicated cases for the mercurial treatment it is an excellent method.

Dr. James H. Buckner, of Cincinnati, read a paper on "Rupture of the Choroid Coat." The length of time which elapses from the date of the accident and impairment of vision is no criterion by which to judge of the amount of damage done to the choroid. The rarity of rupture of the choroid is due to the elasticity of the coats, together with the soft and elastic cushion of fat upon which the eyeball is supported.

Dr. W. S. Caldwell, of Freeport, Ill., read a paper on "Ether and Chloroform; Their Comparative Merits as Agents for the Production of General Anesthesia." The author gave an extended résumé of the statistics of death from chloroform and ether, giving his preference for chloroform and the reasons therefor.

Dr. C. B. Parker, of Cleveland, Ohio, read a paper on "The Use of Oxygen in Chloroform Narcosis." The exhibition of the vital principle, oxygen, with chloroform would seem to be proper on theoretical grounds. In uniting the two there is no chemical union formed between them. It is a mechanical mixture such as we have in the air. The oxygen must be perfectly pure. That usually supplied in tanks is not pure. It must be properly made. The cylinder must have been exhausted of all air before it is filled. The time required to anesthetize is slightly longer than with chloroform, but the advantages far outweigh this minor inconvenience. Of the dangers attendant I am not prepared to say, as I do not consider an experience of 118 cases guarantees any statement relative to

Digitized by Google

that point. There is total absence of vomiting, as well as absence of the extreme pallor and weakened heart beats, with shallow respiration. The duration of the shock from anesthesia is with this agent very much shorter. The patient always recovers promptly, without any delirium.

Dr. C. Travis Drennen, of Hot Springs, Ark., read a paper on "Syphilis as an Etiological Factor in the Production of Tabes Dorsalis."

Dr. W. F. Barclay, of Pittsburg, read a paper on "Diseases of the Nose and Throat in Children." The author dwelt particularly on the possible results of acute and chronic purulent and mucopurulent rhinitis in children, pointing out not only the necessity for more attention by the family physician, but as well demonstrating that almost if not all of the pathological conditions in the nose occurring later in life have their origin in this condition in childhood. The paper throughout was an unusually practical and interesting one. Practical because we see it daily demonstrated in our professional life. Children should be taught to breathe through the nose rather than the mouth. Parents should be taught that surgery can relieve, very easily, those who are unable to breathe through the nose.

"Surgical Melange" was the title of a paper read by Dr. J. Merrill Ricketts, of Cincinnati.

I. Ligation of brachial artery. Secondary hemorrhage occurred six days after an accident. Five days later another severe hemorrhage occurred. The middle brachial artery was ligated at that time. Six days later a third hemorrhage occurred. Erysipelas followed and recovery was uninterrupted. The superior profunda and its branches were the source of the hemorrhage after the ligature of the brachial. The ligatures should have been applied above the superior profunda.

II. Gunshot wound dividing the facial artery. Roller compresses were sufficient to control the hemorrhage. Multiple abscesses appeared on the cheek subsequently, one of which left a salivary fistula. This fistula was finally closed by the introduction of a silver wire.

III. Talipes equinus varus of left foot, with external deformity. Phelps' operation had been made one year previously, with but slight improvement. The astragalus was removed, five weeks later, through the dorsum of the foot. Division of the tendo-Achillis was not necessary.

IV. Hypertrophied prostate. On the twenty-fifth day of a severe attack, double orchidotomy was done under cocaine anesthesia. I have found cocaine will answer every purpose in these cases. This was the third case in which the same operation had been done; all were successful.

V. Sarcoma of the sacrum. There was present a syphilitic diathesis. It had been previously diagnosed as a fatty tumor. Complete removal was followed by a prompt recovery, leaving a fistula from the rectum into the cavity. This was successfully closed by a later operation.

Papers were also read by Dr. Fenton B. Turck, of Chicago, "Further Report on the Treatment of 500 Cases of Gastritis;" Dr. Casey A. Wood, of Chicago, "Some Rare Forms of Keratitis;" Dr. A. E. Stearne, of Indianapolis, "The Significance and Occurrence of Capillary Pulsation in Nervous Diseases;" and by Dr. G. I. Cullen, of Cincinnati, "The Newer Remedies in Otology and Their Results."

AMMONOL IN THE COURTS.—A motion was argued in the supreme court before Justice Pryor, August 21, in an action brought by Dr. Cyrus Edson, late of the health department, against the Ammonol Chemical Company, of New Jersey, and Dr. Allen H. Still and F. W. Stemmler, in which he asks that Still and Stemmler be enjoined from making or further selling a preparation made by the company, and for the abrogation of a number of contracts that he made with the two defendants, charging that they have defrauded him out of an interest in the company, and have failed to carry out their contracts.

It appears that in 1892 he, with Still and Stemmler, the former a physician and the latter a commission merchant, entered into a contract, under the terms of which a stock company was to be formed for the manufacture of Ammonol and its sale to physicians. Stemmler was to furnish capital and push the sales. Still was to boom it among physicians, and Edson was to furnish the formula, and also to use his influence to have the preparation adopted. Stemmler got sixty per cent, Still twenty per cent, and Edson twenty per cent of the stock.

As stated by Edson's lawyer, Dr. Ullo, Dr. Edson, through motives of "professional delicacy," did not care to hold stock or figure openly in the scheme, so he agreed to surrender his twenty per cent of stock for a one-tenth interest in the dividends of the company. He now contends that it is this interest out of which he has been defrauded by the conspiracy of the defendants, Still and Stemmler, who, he says, to further their conspiracy, have voted to themselves salaries of $3,000 and $2,000 a year respectively, and have tampered with the books and papers of the corporation.

Dr. Pincoffs, representing the defendant Stemmler, referred sarcastically to Dr. Edson's "professional delicacy." Justice Pryor was plainer. He said:

"The whole amount of the matter is that Dr. Edson was willing to take his profits from a quack medicine."

"Oh, no, your honor," cut in Dr. Pincoffs; "it is not a patent medicine; it is a very good thing."

"Well, at any rate," said the court, "he was willing to appear indifferent to the sale of the preparation, while he was really talking it up to the profession for his tenth interest."—*American Druggist and Pharmaceutical Record.*

ARE you a subscriber to the WESTERN MEDICAL REVIEW? If not, why not?

Digitized by Google

EXPERIENCE OF AN AMERICAN PHYSICIAN IN MEXICO.

A CASE OF MALIGNANT EDEMA—A MEXICAN FUNERAL.

By D. H. GALLOWAY, Ph. G., M. D.,
CHICAGO, ILL.

The patient was a laborer, 38 years old, who had received a crushing injury to the foot from a car wheel, which passed over it high up on the instep. The accident happened on Sunday and he arrived at the hospital Tuesday afternoon, sixty hours later, after a journey of 200 miles.

The injured foot had been wrapped in cotton waste, such as is used about the engines for cleaning purposes. I sent for a Mexican physician and then prepared to operate, with the assistance of a couple of servants. I put the patient to sleep with chloroform, changed to ether and then gave the cone to one of the servants. The leg was prepared for amputation just above the ankle, the operating table being outside the house in the shade of the building. As I began to operate the Mexican doctor arrived and greatly to my relief took charge of the anesthetic. I placed the instruments in two basins on two chairs so that I could reach them without much difficulty, as I had to procure my instruments as well as do my own sponging. In one pan I had a knife, a saw, a pair of artery forceps, and a needle threaded with silk. The other pan contained a few other instruments which I thought might be needed. As the bone was sawed through the doctor took it in his hands to lay it down, thus getting them covered with blood and pus. I picked up an artery and put on a ligature and then looked for more, but could not find any. The doctor noticing my difficulty, wiped his hands on the patient's clothing, and swept his fingers over the stump in search of other vessels which might need tying. As he also was unsuccessful, I motioned (we could only communicate by signs, as I could not speak Spanish and he could not speak English and we had no interpreter) to him to loosen the Esmarch bandage so that we might find the other arteries by the bleeding. He did so but no blood appeared, even downward stroking of the leg failed to reveal any spots bleeding sufficiently to require tying. The wound was then closed in the usual way with silk sutures, a drainage tube put in and a dressing put on. Before closing it however, I irrigated very carefully with a solution of bichlorid of mercury, in the hope that I might remove the infection implanted by the doctor's hands and with the expectation that I would discover, at least, a second artery that would need a ligature. We now turned our attention to a rather insignificant injury in the other leg, a triangular wound of the skin over the thickest part of the calf, exposing the muscles, which appeared to be uninjured. This was carefully washed out with a bichlorid solution and an iodoform dressing put on. On Wednesday I repeated the irrigation of this wound, which seemed to be in good condition. On Thursday the dressing was saturated with a bloody fluid, and I irrigated it several times with hot bichlorid solution. Friday the discharge was more copious and the leg slightly swollen. In washing it I separated the muscles with my fingers and irrigated very thoroughly between them. All day the swelling increased, so that at 4 o'clock the leg seemed ready to burst with the tension and it was almost black. Bloody fluid ran in a stream through the mattress to the floor. Several incisions were made from the knee to the ankle, the first one was three-quarters of an inch deep and gaped nearly two inches.

My Mexican friend predicted that the patient would die before morning, but suggested that he have some medicine. At my request he wrote a prescription, which I took to the drug store. The druggist gave me two bottles full (one was not large enough); one held about twenty-four ounces and the other sixteen ounces. Directions, half a teacupful every three hours.

Amputation was out of the question, and the patient died the next morning, five and a half days after the injury. The stump of the amputated leg was healing well, with very little suppuration.

Never having seen a Mexican funeral, I thought this a good opportunity to do so. The patient died at 4:30 A. M., and at 7:30 the Mexican physician wrote out an application for a burial permit. This I took to the "civil judge," who copied the document entire into a large book. He then asked my name, age, birthplace, whether married or single, and the number of children I had. The last question followed the previous one, though I had just said that I was unmarried. I signed my name to what he had written in the book, paid $1.25, and was given the permit. This was taken to the custom house, indorsed by an official there, and we were free to proceed with the funeral. A coffin was obtained for $2.50. It was made of light wood, painted black, and trimmed with white stripes. A cross was painted on top and "1893" on the head end.

The body was wrapped up in the sheet on which it lay and put into the coffin. Four cargadores, hired for the purpose (at 50 cents each), put it upon their shoulders and took it to the graveyard. In twenty minutes we arrived at the "Cemetery of the Angels." This is surrounded by a high stone wall, through which we enter by an iron gate under an imposing stone archway. On passing this gate we came into an enclosure of perhaps five acres, containing quite a number of monuments. This was the "yard of the first-class." Walking through this, we passed by another gate into a second enclosure of about the same size, constituting the "yard of the second-class." The entire surface of the ground here was level, except for irregular piles of earth here and there, and bare except for seven or eight small mesquite trees. Not a spear of grass! Not a flower! Near the middle there was a row of ten open graves, about five feet deep and separated from each other by about a foot of

Digitized by Google

earth. The loose earth was piled up in a windrow at either end of the row of graves. Here the bearers set down their burden. An attendant, who had followed from the entrance with two short ropes and five shovels, took the permit, the coffin was opened for his inspection, but he disdained to look. The lid was put on again and fastened with two or three small nails, driven in with a small stone picked up near by. The coffin was then lowered into the grave nearest the path and the five men began shoveling in the dry earth, talking and laughing meanwhile; but about what, I did not know.

While they were thus engaged I employed myself examining the mound of earth under my feet. I was standing on a human femur. On looking more carefully I found that the earth was covered and filled with human bones! A tibia, a scapula, a radius, half a dozen ribs in a pile, part of a pelvis, bones of hands and feet without number! Easily fifty bones in sight without disturbing the earth a particle! Meantime the grave was full, no mound being made, one of the cargadores said "lista" (ready or done), and we turned away. The burial over, the funeral services ended! Antonio Hernandez under the sod! No, under the sand, gravel, and the bones of his predecessors in this particular spot. Four hours before he began his last long sleep, now begins his last long rest (?). No, five years hence his bones will be notified that their lease is up and they must move. The landlord wants the ground for another tenant. Then his skull, perchance, may sit on a pile of earth, as two skulls sat to-day, and watch his successor take his place. The bones of his hands and feet will be a part of the earth which fills the grave over the newcomer.

I made inquiries and found that this cemetery was eighteen years old, and that every five years the ground is reopened for new burials. The bones are supposed to be gathered up and deposited in a trench dug for that purpose, but that many of them are returned to help fill up the newly opened grave, I myself witnessed. The rich buy lots and dig graves eighteen to twenty-four (!) feet deep, in order that their bones may not be exhumed in the next turning up of the soil.

What an impression is made on one accustomed to the orthodox funeral at home! The darkened room or church, the expensive felt-covered, silver-trimmed coffin, the crape, the flowers, the people with their sympathy and tears. The pall-bearers, dressed in black, with white gloves and bared heads. The hearse, with its somber plumes and black horses, the long procession of carriages; the cemetery, with its trees and grass, flowers and monuments; the throng of people about the open grave, the measured tones of the minister repeating the solemn burial service, all culminating in the "ashes to ashes, dust to dust," as the clods roll in upon the coffin. To one who carried such an impression of what a funeral ought to be, the Mexican way seemed forbidding enough.

But is not that, in some respects, a better custom than ours? The object in putting a body into the ground is, or ought to be, to resolve it into its elements. There it is put in as light a coffin as possible and buried in dry soil, where disintegration will rapidly take place. Here we put it in a strong, sometimes a metallic, coffin and enclose this in an outer box; thus retarding decomposition as much as possible. There a funeral costs $6 or $7, here even the poor will spend $100 or $200 on a funeral, for coffin, carriage, flowers, etc., even when they are too poor to pay the doctor or even buy the decent necessities of life. If prejudice is so great that cremation cannot soon be made general, people might, as a step in the right direction, be compelled to use coffins of wickerwork or very light wood, so that nature's work of purification might be facilitated, and not retarded.

In five years, buried in Mexican soil, the body disappears, except the bones. Investigations in our cemeteries would reveal a very different condition. We should not regard with such horror the customs of other people without considering the end sought. The feeling of abhorrence we have for new or strange customs is only relative and disappears when we become accustomed to them, particularly if any good end is attained thereby.

As I left the cemetery I was approached by the attendant with a request for money to buy pulque for himself and the cargadores. Returning to the hospital, I took the mattress, bedding, dressings, and, indeed, everything combustible which had been about the patient, into the backyard, saturated it with kerosene, and burned it. The room was scrubbed, then washed with a solution of carbolic acid and left open and unoccupied for some time. There were other patients in the hospital who had wounds, but none of them became infected.—*Journal of American Medical Association.*

Short articles on practical subjects, reports of interesting cases, and matters of interest to the profession are solicited.

Miscellaneous.

Constipation of Infants.—Dr. Marfan (*Practitioner*) says that a nursling should have two to four stools a day during the first two months, and one to two after the first year. Whenever they are less frequent constipation is present. Transient or habitual constipation may be due to retained meconium, stricture of intestine, atresia ani; symptomatic constipation, to febrile states, cerebral disorders; alimentary constipation, to simple or sterilized cow's milk, excess of casein or mineral waters, deficient sugar or fat; congenital constipation, to intestinal occlusion, excess of length or folds of the large bowel. Consequences: Rectal prolapse, umbilical hernia, invagination of the bowel, convulsions, prurigo, urticaria, eczema, anal fissure, mucous, serous, or ulcerative colitis.

Digitized by Google

Treatment: Alimentary of nurslings, a little sugar water (Jacobi), cow's milk four parts to one hundred of sugar water; rectal lavage by the urethral catheter, two tablespoonfuls of glycerine to one litre of water, or two tablespoonfuls of oil with the yolk of an egg to four drams of water; massage, electricity; suppositories for fissure; no laxatives before three months, no purgatives during the first year.

Treatment of Typhoid Fever by Internal and External Use of Guaiacol.—Dr. A. Hull (Montgomery) has treated with success nineteen cases of typhoid fever by ingestion of guaiacol, as an intestinal antiseptic, in doses of from one-half drop to one drop and a half every other hour, day and night, associated with painting the skin with the same remedy for antithermic purposes. After washing thoroughly with soap and wiping the integument of the abdominal region, from five to twenty drops of guaiacol are applied to the abdomen, the region being then covered with waterproof. Five drops are first thus applied, the dose being gradually increased until as many drops are used each time as the patient is able to bear without feeling chilled. By this means, supplemented, if necessary, by cold ablutions, Dr. Hull produces a marked antithermic effect, which persists for about three hours. In addition he gives three or four doses of six milligrammes each of calomel daily, until a slight purgative effect is obtained, this treatment being repeated from time to time. Lastly, he washes out the intestine thoroughly once a day with tepid or cold soap suds.—*North American Practitioner.*

Radical Cure of Hydrocele.—Incision, with partial removal of the sac, is to be resorted to when the sac is found to be thickened, or where it protrudes far into the inguinal canal. A modification of this operation is suggested, which it is believed will greatly simplify the usual procedure: It is performed by making a free incision over the long axis of the tumor, dividing the structures down to the sac, at the same time being careful not to open it. By means of an Allis dry dissector, the scrotal tissues are quickly separated from the tunic, which is left slightly adherent posteriorly; this being the portion of the sac which covers the cord and is not disturbed. The sac is then made tense, fixed by means of a tenaculum, opened by a touch of the knife, and the fluid allowed to escape. The sac, having been thoroughly dissected from the scrotal tissue, is removed in a single piece by means of the curved scissors. The bleeding vessels are ligated and the wound dried. Should there be much hemorrhage from the edges of the cut sac, it must be controlled by a continuous suture passing completely over the margin. The portion of the tunica vaginalis lying over the cord is swabbed with carbolic acid, the wound irrigated with 1 to 1,000 bichlorid solution, a small drainage tube inserted, and the parts closed by the silk-worm-gut suture. An antiseptic dressing is then applied. The drainage tube is removed after twenty-four hours; the sutures after the seventh day.—Dr. Orville Horwitz, in *Jour. of Cut. and Genito-Urinary Dis.*, September.

The Artificial Feeding of Infants.—Dr. Dillon Brown, writing on the above subject (*American Medico-Surgical Bulletin*), insists that properly prepared cow's milk is the best, and thinks Rotch's plan of preparing it is one of the best, which is as follows:

He lets a quart of good milk stand in ice water for six hours, and siphons off from the bottom 24 oz. of milk, leaving 8 oz. of cream on the top, which will, on the average, contain 10 per cent of fat.

Now it becomes a comparatively simple matter to modify the food by mixing the various ingredients to get any percentage of fat, proteids, and sugar.

The average milk—namely, 4 per cent fat, 7 per cent sugar, 1½ per cent proteids—will be obtained by mixing 8 oz. cream, 1 oz. lime water, 11 oz. water, and 8¼ dr. of milk sugar (no milk); "4-7-2" milk will be obtained by mixing 8 oz. cream, 2½ oz. milk, 1 oz. lime water, 9½ oz. water, and 7½ oz. milk sugar, etc. By increasing the cream the percentage of fat and proteids will be increased in a 20-oz. mixture by about 0.5 per cent of the former and 0.18¾ per cent of the latter for each ounce; the percentage of proteids will be increased 0.18¾ per cent for each ounce of the skimmed milk, etc.

Dr. Brown says: "My own experience has been that the best results are obtained by the home modification of a cow's milk which is wholesome and properly handled; and when such a milk can be obtained the infant thrives on a raw milk much better than on a Pasteurized or sterilized one. And again, I usually remove as much of the casein of the milk as possible with rennet or dilute hydrochloric acid, and substitute in its place the albumin from an egg. This gives better results, as we would expect when we remember that the proteids of cow's milk, as compared to human milk, is for casein as 3.01 is to 0.63, while for albumin it is as 0.75 is to 1.31. In other words, cow's milk contains five times as much casein and only one-half as much albumin as human milk."

Some of the Unsuspected Effects of the Bromides.—Dr. J. Allison Hodges read a paper on this subject before the Richmond Academy of Medicine and Surgery on August 25th. Ordinarily, he says, these salts are considered by the profession as harmless, which is reprehensible and dangerous, causing their indiscriminate and continuous use. Among the common and unsuspected untoward effects of the bromides are the following:

I. *Increased Irritability of Temperament.*—Most

Digitized by Google

patients who have undergone the continued use of the bromides develop an irritable, peevish, and querulous disposition, which is particularly noticeable in epileptics, and which is often mistaken for the manifestations of the disease itself. This is proved by the temporary withdrawal of the treatment, which the author has demonstrated himself.

II. *A Depression of Spirits, with a Tendency to Moderate Melancholia.*—There are some neurotic cases in which moderate doses of the bromides occasion despondency in the individual, which at times amounts almost to a melancholia.

III. *Impairment of Memory and Also of Contractility of Muscles.*—In nearly all cases where large or continued doses of these drugs are taken there is, to a greater or less extent, an impairment of memory. Weakness of mind, without perversion of intellection, is a very constant result of the continued use of large doses. Failing memory, especially in epileptics, who, according to the general routine of practice, take the greatest quantity of bromides, is almost invariably assigned to the disease as the causative factor, but the bromides themselves are often the cause of the condition.

IV. *Irritant to the Gastric Mucous Membrane.*—In small, diluted doses the bromides are acceptable to the stomach, but in large doses, on continued administration, they are irritant. This point is clinically well established.

V. *Bromides Act as an Aphrodisiac.*—Some authors affirm that, if given in large doses, they diminish or entirely subdue the venereal appetite, although on this point the author cannot affirm from his own experience, as none of his patients developed this condition.

VI. *They Disturb the Circulation.*—Very obvious effects are produced on the heart's action when large doses are given, and Bartholow and Da Costa are quoted to prove this assertion.

VII. *Extraordinary Susceptibility to Toxic Effects in Case of Cerebral Lesions, Etc.*—Several recognized authorities speak of the sudden bromic toxication liable to occur in persons who have suffered cerebral lesions from trauma, or who have had amboli or necrotic processes around clots. Surgically, this is an important fact and should be heeded.

VIII. *Tendency to Give Rise to Homicidal and Suicidal Impulses.*—The author quotes Rames, Huette, Hammond, Draper, and others to prove this assertion, and gives his own experience, which shows the same conclusions.

IX. *Bromides Weaken the Nervous System.*—By reason of their characteristic physiologic action, these salts must, in continued or large doses, depress certain organic functions, and, therefore, be weakening to the nervous system, for in order that a sedation of the nerve centers may be secured, they diminish the action of the heart, lower the temperature, and consequently lessen the blood supply to various organs. A patient addicted to the bromic habit presents a picture not easily effaced from memory, for his pallid face, dilated eyes, and tremulous gait are only too patent evidence of a nervous wreck and a blighted mentality.

The writer believes that the field of therapy of these salts is limited and he is skeptical of their efficacy, even in temporarily controlling the nervous explosions of the epileptic, is commensurate with the deleterious effects to the patient's general constitution. He believes that too little care is used in prescribing these drugs, and too little attention paid to the proper regulation of the dose; circumstances, in his opinion, which account for the great and increasing harmful consumption of the numerous proprietary preparations of the bromides which are now used by our people as "headache" cures, "insomnia" cures, etc., and which owe their popularity and efficacy to a varying proportion of the bromides in their composition. It is not the small and occasional dose that ultimately wrecks the constitution, but the continuous daily use, in many cases for every nervous manifestation, as conceived and diagnosed by the layman himself, without the knowledge or direction of the physician.

Board of Health Proceedings.

NEBRASKA STATE BOARD OF HEALTH.

MEMBERS—Dr. J. V. Beghtol, Friend, President; Dr. C. F. Stewart, Auburn, Vice-Pres.; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.
Board meets first Thursday of each month at the state capitol, Lincoln.

THE Nebraska State Board of Health, at its meeting held November 5th, granted certificates to the following:

W. E. Minor (R.), Plattsmouth,
University Medical College, Kansas City, 1889.
Anna M. Cross (Ecl.), Crawford,
New York Eclectic Medical College, 1896.
Chas. J. Alger (R.), Columbus,
Medical Department, University of Colorado, Boulder, 1896.
Henry W. Francis (R.), Bancroft,
Omaha Medical College, 1896
Penn W. Ransom (R.), Omaha,
Chicago Medical College, 1879.
Adelbert Townsend (R.), Brock,
Rush Medical College, 1896.
Marshall B. Kitchum (Ecl.), Lincoln,
Eclectic Medical Institute, Cincinnati, 1882.

Abram S. Pendery, of Omaha, was refused a certificate. He affirms that he graduated from the defunct Physio-Eclectic Medical College of Cincinnati in 1876. He makes his claim for certificate on the fact that he was registered in Washington county in 1881. The board claims that the registration was illegal, as he had not practiced long enough at that time to be qualified to register under the law.

The application of E. D. Cross was laid over till next month. He claims to have graduated from the College of Physicians and Surgeons, Balti-

Digitized by Google

more, in 1878, but had his diploma burnt up some years ago.

J. T. Cook, of Omaha, says he has practiced for some years, the last three in Omaha, and now wants a certificate. He "graduated" from the Illinois Health University last May. He did not get the coveted certificate. Judging from circulars on file, this gentleman must have been doing a large business, and is an adept at curing incurable diseases. If he has performed the wonderful cures that he claims to have done in these circulars, the state board did very wrong indeed in not giving him a certificate. It seems too bad that he cannot go on doing the wonderful work that he says he has been doing.

Advancements in Medical Requirements in Illinois.—Whereas, the wise and progressive enforcement by our predecessors of the act to regulate the practice of medicine in the state of Illinois, passed July 1, 1877, has resulted in a general, but not uniform improvement of the methods of medical education throughout the United States, and a material elevation of the standard of professional attainments and ability necessary to obtain the legal right to practice medicine in many states, thereby securing in such states a better equipped, more competent, and more scientific body of medical men, to the great gain and advantage of the people thereof; and whereas, this latter result has been attained to the fullest extent in those states where the college diploma is not recognized as final, but only as a qualification for examination by a board whose members are not connected with, or interested in, any college or teaching institution:

Be it resolved, by the present members of the Illinois State Board of Health, with the fullest appreciation of the invaluable work of their predecessors, that medical education and the status of the doctor in medicine have outgrown the limitations of the medical-practice act of 1877; now, therefore,

Resolved, That said act should be so amended as to require, first, that all applicants for the right to practice medicine and surgery or any of their branches in the state of Illinois shall demonstrate their fitness for such practice, through an examination by a board of impartial, competent, and practical examiners, skilled in the various branches of medicine and surgery, and no member of which board shall be connected or affiliated with or interested in any diploma-granting college or teaching institution. Second, that no applicant shall be eligible to such examination unless the legal possessor of a diploma of graduation from a medical college in good standing.

Resolved, That this board earnestly invites the co-operation and assistance of kindred boards throughout the United States, to the end that uniformity of practice may ultimately obtain in the recognition of medical practitioners in all parts of the country; of all reputable medical colleges whose dignity and usefulness will hereby be promoted; of the medical profession of the state, as represented in the various medical societies, with the view of excluding the incompetent and unworthy from its ranks; and of the members of the forthcoming general assembly in this effort to protect the health and lives of the citizens of the state.

J. W. Scott, *Secretary*,
Illinois State Board of Health.

Necrology.

Dr. Jos. Landon, of Kansas City, died October 13.

Dr. J. M. Hodge died in Topeka, Kansas, September 21st, aged 71.

Dr. W. R. Rooks died at Texarkana, Ark., October 23, aged 70 years.

Dr. Alexander B. Shaw, of St. Louis, a neurologist of note, died October 2d.

Dr. George Harley, the noted writer and physician of London, died October 27th, aged 67.

Dr. C. E. Brown-Sequard, only son of the eminent physician of that name, died in Atlanta, Ga., October 20th, aged 30.

Dr. James B. Murdock, late dean of the Western Pennsylvania Medical College, and one of the best known physicians of Pennsylvania, died at his home in Pittsburg, October 27th. He was born in Glasgow, Scotland, in 1830.

Books and Pamphlets Received.

Acne. By James M. Blaine, M. D., Denver. Reprint from the *Medical Bulletin.*

Alopecia Prematura. By J. M. Blaine, M. D., Denver. Reprint from the *Medical Bulletin.*

The Value of Work. By H. G. Wetherill, M. D., Denver. Reprint from *Colorado Medical Journal.*

The Care of the Breast in Lactation. By Charles Rosewater, M. D., Omaha. Reprint from the *Medical Record.*

An Exact Method for Determining the Capacity of the Stomach and the Amount of Residual Contents. By J. H. Kellogg, M. D. Reprint from *Modern Medicine.*

Over the Hookah, The Tales of a Talkative Doctor. By G. Frank Lydston, M. D., professor of Genito-Urinary Surgery in the Chicago College of Physicians and Surgeons, professor of Criminal Anthropology in the Kent College of Law, etc. Sold by subscription only. Sent prepaid on receipt of subscription price. Price in cloth, gilt top, $4. Price in morocco, full gilt, $5. Over 600 pages octavo. Profusely illustrated from the author's designs by C. Everett Johnson. The Fred Klein Publishing Co., Chicago.

We shall give an extended notice of this unique work next month.

Digitized by Google

Therapeutic Notes.

Nettle Rash.—

℞	Acetate of lead	grs. xv.
	Dil. hydrocyanic acid	ʒ iv.
	Alcohol	ʒ viijss.
	Distilled water q. s. ad.	℥ ij.

M. Sig.—To be applied on cotton wool.—*Dublin Journal of Medical Sciences.*

Laxative for Children.—

℞	Bicarbonate of sodium	ʒ iij.
	Powdered rhubarb	℥ ij.
	Sulphate of sodium	℥ j.
	Oil of peppermint	gtt. xx.

M. Half to one teaspoonful before breakfast.—*Journal de Med. de Paris.*

For Persistent Constipation, both during pregnancy and after the confinement, Dr. Wells (*Philadelphia Polyclinic*, August 15, 1896) frequently uses the following prescription:

Fluid extract of cascara sagrada	fʒ iv.
Aromatic syrup of rhubarb	fʒ iv.
Syrup of orange peel enough to make	fʒ ij.

M. Dose.—One teaspoonful every three hours.

External Use of Chloral.—Dr. Brodnax (*Semaine Med.*, in *Med. and Surg. Reporter*, August 8, 1896) recommends the following formula for external use of chloral:

1. For pruritis, followed by urticaria, or any other eruption:

℞	Chloral,		
	Acid. carbol.,	aa 0	5 (gr. viij).
	Ol. olivæ	50	(ʒ jss).

2. For toothache:

℞	Chloral,	aa 5.0 (ʒ jss).
	Camphor.,	
	Acid. carbol.,	
	Glycerin.,	

A piece of cotton soaked in this solution is put on the aching tooth.

3. For earache:

℞	Chloral,		
	Camphor.,		
	Acid. carbol.,	aa 0	5 (gr. viij).
	Ol. ricini	15	0 (ʒ ss).

Some drops of this solution are put into the ear; the solution must be warmed each time.

4. For acute coryza:

℞	Chloral	0	5 (gr. viij).
	Ol. ricini	15	0 (ʒ ss).

After having cleaned the nasal cavities, wash them with this solution.

The Treatment of Eczema of the Vulva.—Lusch (*Union Med.; Rev. de Therap.; Ctrlbl. f. d. ges. Therap.*) recommends bathing the parts morning and evening with the following solution, warm:

℞	Tincture of opium,	
	Sodium bicarbonate,	aa 8 parts.
	Potassium bicarbonate	4 parts.
	Glycerin	6 parts.
	Distilled water	260 parts.

M. The bathing is to be followed by dusting on a mixture of forty-nine parts of starch and one part of powdered camphor.

Preparation of Gauze Dressing.—Dr. Martenson gives the following directions in *La Medecine Moderne:* Rolls of cheese-cloth about thirty yards in length are folded and placed in jars. On these the following solutions are poured, depending upon what kind of gauze it is desired to produce:

CARBOLIZED GAUZE, FIVE PER CENT.

℞	Colophene	50 parts.
	Castor oil	15 "
	Carbolic acid	28 "
	Alcohol, 90°	207 "

Three hundred parts, by weight, of this mixture are taken to five hundred parts of gauze. Or the following may be used:

℞	Vaseline	30 parts.
	Carbolic acid	28 "
	Benzin	242 "

Three hundred for five hundred of gauze.

THYMOLATED GAUZE.

℞	Thymol	10 parts.
	Essence of turpentine	3 "
	Paraffin oil	10 "
	Benzin	200 "

Three hundred and three of the solution to five hundred of the gauze.

SUBLIMATED GAUZE.

℞	Bichlorid of mercury	1½ parts.
	Chlorid of sodium	½ part.
	Glycerin	15 parts.
	Distilled water	500 "

Equal parts of the solution and gauze are employed.

IODOFORM GAUZE.

℞	Iodoform	50 parts.
	Paraffin oil	10 "
	Ether	400 "

The weight ratio between the amount of solution used and the gauze is four hundred and sixty to five hundred. The gauze is allowed to soak for twelve hours in this solution, is then dried, and stored in an antiseptic, air-tight jar.—*Medical Record*, August 15, 1896.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL I. No. 8. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. DECEMBER 15, 1896.

Original Articles.

TEMPERAMENTS.*

BY A. R. MITCHELL, M. D.,
LINCOLN, NEB.

Man is constantly looking forwards and upwards. Each day evolves some new theory. Each day sees the abandonment of some cherished dream. The crucible of experience is the sepulcher of hopes never to be realized, it plays the major part in the grand scheme of that evolution which, as the years pass, carries us to a better understanding of the processes of life and death—of health and disease.

In these closing years of the nineteenth century, when great scholars are flooding the world with light, one should hesitate and invoke consideration of the 13th chapter of I Corinthians, whose closing lines are the comfort of ordinary mortals, before calling from the dusty past a topic for the consideration of a scientific body. The subject of temperament is as old as the recorded history of medicine. It pervades all ancient medical literature and it permeates nearly all modern medical thought and conversation. No expression is commoner in the doctor's vocabulary than "In one of his temperament;" or, "He is of a phlegmatic temperament;" or, "She is of a very nervous temperament." So common, indeed, is the use of such expressions that they are heard constantly in the daily conversations of the non-professional; yet were any one using them to be asked their significance, would not the answer be a confusion of terms, mingling diathesis, temperament, and even cachexia? Would not the questioner hear the old doctrine of proportions, taking cognizance, also, of the color of the hair, skin, and eyes; the size of the head, its form and special features; the size of the abdomen, which, if large, presumed the presence of a liver fitted for the preparation of a popular French delicacy,—would not the definer of the so-called lymphatic indicate a Falstaff physically, endowing his type with sluggish mentality? Would not the nervous be typified by a Jay Gould, with small body, disproportionately large head, dark eyes and hair, quick in thought and action? And yet he knows, as all of us know, that the size and shape of the head, within physiological limits, betokens little of its capacity mentally. We know that the color of hair has no more to do with the physical or mental traits of the possessor than the number of hairs. The eyes, likewise, are each but an inheritance possessed by the strong and vigorous or by the weak and puny. That red skin and short neck, formerly presumed to predispose to apoplexy, are likewise but features, and do not make a type. The blood is not a brighter hue in the blonde, nor is the quantity proportionately greater in the red-faced—the pigmentation of his skin is different, that is all. That small body with large head, dark eyes and hair, is not always —not even disproportionately—the active machine, with steely muscles and nerves. In him we may find the drawl of the down-east Yankee, the torpid liver of the Missourian, the glandular enlargements of the Sir John type, the mental hebetude of the peasant.

Many of the early writers of this century looked upon temperament as an outgrowth of phrenology and embracing most of its fallacies. Modern writers give it no place for specific consideration, yet refer to it in many instances as a modifying influence in disease. Life insurance blanks formerly made it a part of their applications. Most of them have now forsaken it. Temperament is not a microbic product. As in every-day use, it is the "Prodigiosis" of centuries of acute observation, or, more accurately, a mixed product, refined by age, tested by time, and passed through all the cultures of medical thought. Paulus Æginita, about 380 A. D., wrote as follows:

"That man is in the best temperament of body when it is in a medium between all extremes, of leanness and obesity, of softness and hardness, of heat and cold, of moisture and dryness, and, in a word, who has all the natural and vital energies in a faultless state. His hair, also, should be neither thick nor thin, and in color neither black nor white. When a boy his locks should be rather tawny than black, but when an adult, the contraverse."

The same author, on the diagnosis of temperaments, said:

"Those bodies which are of a hotter temperament than the moderate will have their teeth earlier than usual, and will grow in like manner. They feel warmer to the touch and have less fat; they are of a muddy color, have their hair black and moderately thick, and their veins large. But if such a one is also fat and brawny and have large veins, he is fat from habit and not from nature.

"The following are the marks of the cold temperament: Such bodies appear cold to the touch,

* Read before the Lincoln Medical Society, November 10, 1896.

Digitized by Google

are without hair and are fat, their complexion, like their hair, being tawny. But when the coldness is great they are pale, leaden-colored, and have small veins; and if lean, this does not proceed from nature, but from habit.

"The dry is harder and more slender than the temperate—the hardness, indeed, being inseparable from the dry temperament; but leanness not only follows the congenital temperaments, but also those which are acquired by long habit. It is a mark of hardness when the body is rendered unapt for motion, dry and parched, by drying applications.

"The humid is in all other respects like the temperate, but is softer and fatter, and the softness is inseparable from it; but the grossness not only follows the connate temperament, but also that acquired by long habit. It is peculiar to the humid temperament that it is oppressed by things of a moist nature. The warm and dry temperament is extremely shaggy, having the hair of the head, in early age, of rapid growth, black and thick, but in after life baldness follows. The veins are large, as are, likewise, the arteries, which beat strongly. The whole body is firm, well articulated, muscular, and without obesity, and the skin is hard and dark.

"When the temperament is cold and humid the chest is narrow, and, like the rest of the body, without hairs, the skin is soft and white and its hairs tawny, especially in youth, and such persons do not get bald when they grow old; they are timid, spiritless, and inactive, their veins are invisible and they are gross and fat, their muscles and legs are feeble and their joints ill-formed, and they are bandy-legged. But should the humidity and coldness increase, the color of their skin and hair becomes tawny, or, if they increase still more, pale.

"The hot and humid temperament is softer and more fleshy than the best temperament, and, when it increases, is much subject to putrid disorders; but if it be only a little more humid and much hotter than the moderate, the bodies of such persons are only a little more soft and fleshy than the moderate, but they are much more hairy and hotter to the touch. But if the cold and the dry grow equally together, such persons have naturally their bodies hard, slender, and white, with fine muscles, small joints, and little hair, and they are cold to the touch. Although slender, fat is mixed with their flesh. The color of their hair is correspondent to the degree of constitutional coldness. As to disposition of mind, they are spiritless, timid, and desponding.

"To say all in a word, with regard to the compound temperaments, they are always to be distinguished by the marks of the prevailing quality."

Paulus Æginita followed closely the arrangement of Hypocrates, who classified the temperaments to correspond with their four elements,—fire, air, earth, and water; and to the four qualities ascribed to these,—heat, cold, dryness, and moisture,—four constitutions were discovered. "The blood," says Dr. Johnson, "was viewed by them as the first vital principle, if not the life, to which every constitutional peculiarity was referred, and as it departed *en masse* or its separate elements from what was supposed to be a state of health, the system was inferred to suffer in proportion." Parenthetically, I may mention the fact that we, in this close of the most scientific and learned circle of history, are nearing this ancient view—not, however, with reference to temperament. If the red particles abounded, the constitutional habit was sanguine; if the phlegm—or glandular—were in excess, the constitution was phlegmatic; and as the yellow or black bile preponderated, the choleric or melancholic prevailed. Is it not strange that the theory of temperaments, based upon a foundation primarily as faulty as the Psora of Hahnemann, has survived through all the changing centuries, scarcely modified by the master minds, who, step by step, have led us on to the great Pasteur? In the classic Maudsley, in the learned Osler, in the profound Fothergill we see temperament referred to, but no attempt made to materially modify the old conceptions builded, as they were, on old errors. Like all philosophic dogmas, an element of truth is woven into the faulty web, and all efforts, thus far, to improve the Hypocratic arrangement have resulted only in confusion from divisions and subdivisions. Galen made eight, and later writers have carried the divisions in numbers to the individual units of the world's inhabitants. As an example of one of the efforts to totally eliminate temperaments, let me quote the definition given by Dr. Johnson, editor of the *Medico-Chirurgical Review*, in the criticism of an article by Dr. Thomas, his editorial rival, in 1830: "Constitutional peculiarities are known and denominated temperament—when intended for individual application they are styled idiosyncrasies." Upon this definition he poured out his editorial maledictions upon his rival, yet it is plain that his definition is faulty. Temperaments are not personal peculiarities. If they were they would in no way differ from idiosyncrasies. That we may have some basis, let me venture a definition thus: A synthetic harmonious blending of similar types into classes, which, while differing as individuals, have many physical and mental characteristics in common.

These features may be an inheritance, they may be from intermarriages of totally unlike types,—from environments. The temperament of individuals whose experiences have inured them to the rigors of the north need not differ materially from his brothers of the far south. There are physical and mental individual differences in these far separated peoples, but in a physiological selection made from each do we not find types closely resembling in form and mental movement? Having grouped the individuals corresponding in a general way, are these groups subject—consid-

Digitized by Google

ering their surroundings—to special or particular forms of textural changes or diseases? Is there no difference in the power of resistance to, or the capacity for recovering from, injury or disease in the following groups?

Select from among us a group answering the following analysis in a broad sense: Large, long bones; general angularity; high cheek bones; moderately full, dense, firm muscles; broad shoulders and chest; a mannish skin (its color counts for little),—what we call strong features,—the whole visible structure characterized by strength and toughness; a pulse moderately slow and full. And another group answering to the following: Large chest; large, round development of the abdomen; short, large neck; illy defined muscles; shapely limbs; mentally active, pleasing countenance,—examples of such types being found in Germany, Holland, and England. These two groups would be classed as the bilious and the sanguine, or the motive and the vital. I think motive better; it more nearly describes the class than bilious; but I like to remember those grand old fathers who, in the dim light of their own genius, developed a system, founded on error, which has lived to the present. To these two groups there are commonly added two or three more: The nervous, with its fine skin, small bones, fleshless body, small muscles—quick in action and perception, and the phlegmatic, with its large—not necessarily liver—but belly, its inelastic skin, its slow mental and body movements, its abundance of fat.

Are or are not these groups, omitting the individual exceptions, subject, under similiar influences, to the same diseases? If they are not, let us consign the term to a respectable burial, and no longer use it to mislead ourselves and a trusting and trusted public.

Is the first group, characterized by strength and toughness,—capable of great endurance, and with a mental balance proportionately stable,—as likely to infection, direct or indirect, as him of the flabby flesh, the soggy skin, and ponderous abdomen? I think not; I do not even agree with the commonly-accepted theories that he is fit soil for endemic diseases—derangements of the liver and stomach, hemorrhoids, and heart complications, should he become rheumatic. Kind Providence, a vigorous ancestry contributing, has endowed him with a framework which, under proper management, will outlast the allotted time of man. He will recover from disease or accident with astonishing rapidity. Reverses in business will ruffle but not madden him. If exposed to infection he will more certainly resist it.

The sanguine or vital—the English type, broad, red-faced, and active even in the presence of some fat—resists disease well, but in him, as in the more typically nervous, disease runs riot when it gains foothold. In this class, it has seemed to me, we do see more rheumatism and gout, and more fatty hearts, than even in the phlegmatic; there is less resistance to infection and hereditary influences are strong.

In the nervous group we must make the distinction between the class of bad descent—of an unstable nervous system, "a class unable to bear the stress of adverse events"—and those whose whole body is animated by strong physiological forces. There are men and women of this temperament as stable as him of the vital, with a capacity for endurance not surpassed. They sicken suddenly, they recover quickly or die quickly. They differ from the vital in this, that they accomplish more in less time; but when they begin the downward course they go like snow under a summer sun. The vital with tuberculosis will die slowly or recover. The nervous, in his eagerness, even "in the shadow of death, will project plans for the years which will never come to him." Their finely organized bodies, under the same influences as the vital or sanguine,—sensitive alike to healthful influences and infection,—do not resist disease well. The nervous elements predominating, under disease it yields readily. Tuberculosis, too, is very common in this class.

Is there nothing in temperament? Do not maladies, or the germs producing them, find fitter soil for development in one group than in another? Disease-producing germs grow ill or well according to the medium in which they are planted; and I believe this is true of the media contained in the living human organism. If it is not true, let us bow to modern progress, and, turning, bid a fond farewell to another creation of the fathers.

THE WEANING OF INFANTS.—"When a child reaches the age of six months it is well to think of weaning. I have very successfully tried gradual or partial weaning. This consists in giving at the age of six months one hand-feeding of six to eight ounces during the twenty-four hours. It is to consist of cow's milk three ounces, and if the bowels are regular, three ounces of barley gruel, made water, and about ten-fifteenths grain of ordinary table salt and one-half lump of cane sugar. Each month following the sixth month we can withdraw one breast-feeding and in its place substitute an artificial feeding, so that by the ninth month the infant is weaned. Unless it be midsummer, or on account of some special condition, complete weaning should take place about the tenth month. In addition to giving a bottle in the method of partial or gradual weaning, a small piece of crust of bread or zwieback can be added to the dietary, besides a little thin beef soup or expressed meat juice." He says further that if the increase in weight does not amount to five or six ounces weekly, it is advisable to make a careful chemical and microscopic examination of the breast milk.—*Dr. Louis Fischer, in Pediatrics.*

THE WESTERN MEDICAL REVIEW a year for one dollar! Can you afford to be without it?

Digitized by Google

SURGICAL NOTES.

By J. E. SUMMERS, Jr., M. D.,
PROFESSOR OF PRINCIPLES AND PRACTICE OF SURGERY, OMAHA MEDICAL COLLEGE.

Resection of a Gangrenous Portion of the Small Intestines and End to End Approximation with the Murphy Button.—Cure.—On Tuesday, October 20th, 1896, I was requested by Dr. George Tilden, of Omaha, to see Mrs. B., aged 52, who had had a right femoral hernia for many years, in the management of which she from time to time wore a truss. For several weeks prior to my first seeing her she had not worn the truss. On Saturday and Sunday preceding my visit Dr. Tilden had seen her and prescribed some simple remedy for symptoms referable to indigestion. Knowing that the woman had a hernia, the doctor asked to examine it, but was refused permission, the patient declaring that she knew it was all right, as she had no pain in that locality, and that her bowels were acting regularly. On Tuesday she sent for the doctor, who, from the general and local symptoms, recognized a strangulation of the hernia of an aggravated form. No attempt at taxis was made, but I was summoned and arrangements made for immediate operation. Upon opening the sac a loop of small bowel was found strongly bound to the sac by old adhesions. The integrity of the bowel appearing dubious, a liberal incision was made from without, dividing everything so as to admit of inspection. This proved to be a wise procedure, for had I made traction downwards and attempted to release the adhesions of the gut to the sac, after the use of the knife as employed generally, it could only have resulted in a leakage and probable infection. The bowel was found to be completely gangrenous and about to give away where it had been circularly constricted, as if by a tightly drawn string; likewise irregular gangrenous areas extended, mostly in the proximal direction, for a distance of one and one-half inches. All of the gangrenous bowel, with an inch of healthy bowel on either side, was excised and an end to end approximation made by means of a Murphy button. The sac was ligated and excised and careful closure of the wound, with lower angle drainage, made with a view to a radical cure. The bowels moved regularly after the third day. Convalescence was uneventful and the button passed upon the twentieth day. Cultures made from the fluid formed in the sac demonstrated the presence of the colon bacillus. This is the sixth patient upon whom I have operated, using the Murphy button. The first was a resection of five inches of the lower sigmoid flexure of the colon and end to end approximation, for tubercular involvement and traumatism complicating an operation for the removal of a large tubercular ovary and tube, done three years ago, the patient being in perfect health to-day.

Case II.—An anastomosis of the descending colon and sigmoid flexure, for carcinomatous tumor, producing complete intestinal obstruction, death in about twenty-four hours from shock, and the condition calling for operation. The button had nothing to do with the result.

Case III.—Resection of the small intestine and end to end approximation, for old fistula following a previous abdominal section; death in a few hours. This patient was in a most pitiable, exhausted condition, and not a fit subject for any operation, and the hastened fatal termination can be laid to the zeal of the operator to save the woman's life.

Case IV was a resection of the lower sigmoid flexure of the colon, for annular carcinoma, producing complete intestinal obstruction; end to end approximation; death on the seventh day from peritonitis, caused by leakage at site of approximation. An especially large button was used, one and one-fourth inches in diameter. Death would not have occurred had gauze packing been employed, so as to shut off the area of operation from chance contamination of the general peritoneum. This was done in Case I, and fortunately, because there was a slight leakage for a few days, but the fistula closed and has remained so.

In every case of end to end approximation, or lateral anastomosis, whether the method of operation be by free-hand sewing or the use of some mechanical device, alone or combined with sewing, when, after the anastomosis is completed, there is apparent tension, I would strongly advise the use of gauze packing, the gauze to be allowed to remain sufficiently long for the formation of protecting adhesions around the area of operation, and the formation of a channel from this area to the surface of the abdomen.

Case V.—A gastro-enterostomy for pyloric obstruction, due to a tumor, supposed at time of operation to be malignant. This opinion was possibly erroneous, because of the wonderful general improvement six months after operation, viz., gain in weight of fifty-five pounds; gradual disappearing of tumor, the size of a fist at time of operation; ruddy complexion and all the appearances of robust health. As has been shown by Einhorn and others, not a few growths obstructing the pylorus which are regarded as cancer are benign, and may be operated upon successfully and the patients permanently cured of what might have been abandoned as a short-lived and fatal malady.

Cases I and II were reported in detail in the Omaha *Clinic*, October, 1894.

Internal Esophagotomy After the Method of Abbe.—A boy three years of age was brought to me from Crawford, Nebraska, in May, 1895, with the history that about one year before he had gotten hold of a cup containing concentrated lye and had swallowed some, with the result of making him dangerously ill for several days. The usually recommended treatment for such cases had been adopted by the physician in charge, Dr.

Digitized by Google

Hartwell, and although the child had recovered from the immediate effects of the accident, yet his general health was bad, owing to the difficulty of swallowing and the poor assimilation of food.

For a time the patient improved under careful dietetic management, but in spite of well directed efforts at dilatation it was found that a stricture of the esophagus close to the cardiac end of the stomach was gradually contracting. A stricture of large caliber about one inch below the upper end of the esophagus was also recognized. The difficulty in swallowing increased to such a degree that milk or water could only be given in small quantities at a time. The esophagus would fill from the site of the lower stricture up to the upper posterior border of the larynx, and if more liquid were given it would run into the larynx, causing spasmodic action of its muscles and usually expulsion of the contents of the esophagus. Otherwise the fluid would gradually trickle through the small opening in the lower esophagus into the stomach. The case becoming urgent, I decided to resort to radical measures. Under chloroform anesthesia a median incision was made between the ensiform cartilage and umbilicus and the stomach lifted out of the abdomen. The peritoneal cavity was well protected from infection by careful sponge packing. Two anchoring sutures were introduced into the greater curvature, not far from the cardiac end, about one and one-half inches apart, and the stomach opened between them. Some mucus escaped, which was rapidly sponged up. A long whalebone filiform bougie was then passed from the mouth and its point could be felt at the lower end of the esophagus. This point was seized by forceps, and with considerable force drawn so far into the stomach that a long piece of braided silk could be fastened to it. The bougie was then withdrawn, thus pulling one end of the silk out of the mouth; the other was, of course, hanging out of the wound in the stomach. Passing the index finger of the right hand into the stomach to protect the mucous membrane and edge of the cardiac opening, the ends of the silk thread were grasped in either hand and a sawing motion given, so as to cut the stricture. A heavier silk was then drawn through the esophagus and the movements repeated.

Several bougies, in sizes varying from 6 F. to 20 F., were drawn through the stricture by means of the silk for further dilatation. The stomach wound was then sutured by first closing the mucous membrane with interrupted iron-dyed silk stitches, the muscular and peritoneal coat being sutured with a double continuous stitch of the same material. As an additional precaution an omental graft was fastened over the line of suture. The abdominal incision was closed with silk-worm gut. Convalescence from the operation was practically uneventful. For four or five days nourishment was given per rectum; after this liquids were given by the mouth. At the end of one week dilatation was begun and continued by introducing bougies every other day, increasing the sizes until a 34 F. could be introduced with ease. The diet was watched carefully, gradually changing to that fitted for a child of this one's age. He left the hospital in July, '95, a robust, healthy youngster, and has remained so, dilatation being kept up by the occasional passage of a bougie.

A few cases of non-malignant stricture of the esophagus may require a permanent opening into the stomach (preferably made after the methods of Witzel or Kader in order to sustain life, yet it seems reasonable to believe that most cases can be so handled as to overcome the obstruction and allow of the natural function of swallowing. No one method of operation will suffice in all cases. Perhaps Abbe's in one, in another some one of the many other procedures, among them Hacker's, Bernays', the use of Renvar's funnel, Carter's rosary bougies, etc. In fact, few cases will resist careful, persistent attack by the many means at our disposal.

ESOPHAGOTOMY UPON AN INFANT.—A young female child fifteen months old was sent me by Dr. W. B. Ely, of Ainsworth, Nebraska, with this history: Six weeks before she had swallowed a mouthful of lye from a leach tub, resulting in a very sore mouth and throat, which went on to recovery in four weeks, but at about that time it was noticed that the swallowing of anything lumpy, like apple or potato, was seriously interfered with, and such food was almost immediately regurgitated. Fluids and semi-fluids were offered no impediment. Several days before the child was brought to me she had swallowed a common "kidney" bean, with the effect of shutting off all possibility of swallowing anything. After nursing for a few moments she would begin to gag, and after gagging a few times the milk would come up. While in the doctor's office under observation she had one of these gagging seizures, which resulted in the bean being expelled. On examination I detected a stricture just below the upper end of the sternum. The stricture, however, was, of course, not strongly resistant, and after several weeks' work was sufficiently dilated so that, having instructed the parents how to keep up the dilatation, they were allowed to return to their home. In about one week they brought the child back with the report that it had swallowed a one-cent piece, which had lodged in the gullet and prevented the swallowing of anything but thin liquids. The penny was easily located at the site of the stricture; but after exhausting my armamentarium and that available in Omaha, I failed, as did some of my friends, to dislodge the foreign body. All efforts, medical and surgical, proving futile, I extracted the penny with suitable forceps through the usual incision into the esophagus. The incision was sutured and would have, I believe, closed throughout by primary union had not the parents surreptitiously given nourishment by the mouth, in spite of our well-directed attempts to restrict nutrition to rec-

Digitized by Google

tal feeding until repair had taken place. However, the small fistula which formed closed in three weeks.

NOTE ON THE RELATION OF REFLEX GENITAL IRRITATION TO GLYCOSURIA.

BY G. FRANK LYDSTON, M. D.,

CHICAGO, ILL.,

PROFESSOR OF GENITO-URINARY SURGERY AND SYPHILOLOGY IN THE CHICAGO COLLEGE OF PHYSICIANS AND SURGEONS.

The possible relation of glycosuria to various irritating conditions of the genito-urinary tract is by no means a new topic for discussion, yet it has not received the attention it deserves. A few brief clinical notes may therefore be of value as stimulating further observations in this direction:

The first case in point that came under my observation was the following: E. B., a male child, aged seven years, had been afflicted with glycosuria—which had been diagnosed diabetes mellitus—for some seven months. During this time the child had been under the care of several exceptionally competent medical men, and had seemed at times to be improving under treatment. The sugar in the urine had, however, at no time wholly disappeared, and at the time I was consulted the glycosuria was more marked than it had been for several months—this in spite of careful treatment and an anti-diabetic diet. I had practically no suggestions to offer regarding the treatment of the case and I informed the child's parents to that effect. Some improvement, however, resulted under the continuance of the same line of treatment to which the case had already been subjected, but the glycosuria not only did not disappear, but relapsed from time to time after apparently marked improvement. The possible etiological relation of genital irritation to the glycosuria, I will frankly acknowledge, had not occurred to me. The father of the patient, however, finally called my attention to the fact that the child appeared to be troubled with irritation about the penis. Examination showed an adherent prepuce and balanitis. Circumcision was soon followed by improvement in the condition of the urine, and within two months the glycosuria completely disappeared and the patient was entirely recovered, there being no recurrence of the diabetic symptoms during the year that the child was subsequently under my care.

A second very similar case came under my observation some months later. A boy fifteen years of age had manifested diabetic symptoms for about three months. Bulimia and thirst were especially marked, and the quantity of urine greatly increased. With the case previously recorded in mind, I at once looked for possible sources of reflex genital irritation. I found a stenosed and adherent prepuce and a greatly contracted meatus. These conditions were corrected and the patient put upon arsenite of bromine and the regulation diet. The case rapidly improved and four months later the last trace of sugar had disappeared from the urine. The patient has since remained perfectly well, and as over two years have elapsed without the recurrence of glycosuria, I infer that the cure is permanent.

The pertinence of the foregoing clinical observations may be questioned on the ground that the ordinary dietetic and medicinal measures of treatment were employed. Considering, however, the rapid and fatal course of diabetes in young children, in spite of the best of treatment, I believe we are warranted in the assumption that the genito-urinary irritation bore a casual relation to the diabetes in these cases. The result of the surgical treatment would seem to corroborate this view.

The following case in an adult is quite suggestive: A man aged thirty consulted me regarding an irritable stricture of the deep urethra. Urinalysis showed the existence of marked glycosuria. There were no diabetic symptoms of a general character. After the irritability of the stricture had been allayed by suitable treatment, dilatation was begun and successfully carried out. As the local difficulty improved the glycosuria gradually diminished and finally disappeared. A year later there had been no recurrence.

My friend, Prof. M. L. Harris, of Chicago, has furnished me with notes of a case which is pertinent to the foregoing clinical observations. The patient, a man of thirty-five years of age, had had gonorrhea some years before coming under observation. When first seen the patient had been treating for diabetes mellitus for some time. He presented the usual symptoms. The urine was highly saccharine and passed in large amount. Thirst excessive and bulimia marked. No particular degree of emaciation. Pain and difficulty in urination developed and the patient was referred to the surgical department of the polyclinic for treatment. Urethral exploration revealed a very sensitive, rather soft stricture of the membranous urethra, which admitted No. 12 French. The stricture yielded easily to gradual dilatation, and with the disappearance of the stricture all traces of sugar disappeared from the urine, as well as all symptoms of the diabetes.

A GENTLEMAN gave a party in honor of a celebrated missionary. The ladies appeared in very "décolleté" dresses and the host, fearing the style might shock his reverence, apologized, saying that fashion demanded it. "Oh, I don't mind it at all," replied the missionary; "I've been ten years among savages!"—*Medical and Surgical Reporter.*

PALATABLE SENNA FOR CHILDREN.—Although nearly forgotten, Schoenlein's senna jam served as the prototype of the various fruit, fig, and tamarind laxatives of to-day. It is made by merely boiling together powdered senna and prunes in sufficient water and then rubbing through a fine sieve. The resulting jam is greedily eaten by children without suspecting its medical nature.—*Therapeutische Monatshefte.*

Digitized by Google

A CASE OF CONGENITAL MALFORMATION OF THE RECTUM, THE RECTUM ENDING IN A BLIND POUCH ABOVE A NORMAL ANUS.

BY J. P. LORD, M. D.,

OMAHA, NEB.,

PROFESSOR OF PRINCIPLES AND PRACTICE OF SURGERY, CREIGHTON MEDICAL COLLEGE; SURGEON TO ST. JOSEPH HOSPITAL.

At 3 A. M. on the morning of January 22d, 1885 (thermometer 26 degrees below zero), was called to see Ida R., æt. 16 years, unmarried. Found her in the first stage of labor. Os dilated to the size of a silver dollar. Upon examination one hour later, found the head engaging the superior strait. In ten minutes all were startled to hear the lusty cries of the newcomer from under the mountain of bed clothes which had been heaped upon the patient, who was shaking from extreme coldness incident to the low temperature, poor quarters, and an indifferent fire. The babe, a male of about five or six pounds weight, a lively fellow, was examined by me, as is my custom, to see if it was normally developed in all its parts; observed nothing wrong except a tight foreskin, which did not require immediate attention. Anal aperture appeared to be normal. Upon my visit next day the infant's grandmother said that baby had had no action of the bowels. I told her to give it a few drops of oil and to have no uneasiness, that baby would have an operation in due time. Saturday afternoon, the 24th, I was called to see the mother, who was having chills and fever, due to mammary disturbance and suppressed lochia. These conditions were relieved by the usual treatment. The babe was reported as having had no operation and being restless and sick. The abdomen had become quite distended and had a translucent appearance, enabling me to almost see the various organs and viscera of the abdomen. Ordered syrup sennæ and castor oil and injections per rectum. Sunday morning the baby was worse; had a peculiar mottled appearance—blue as a whetstone, abdomen very much swollen, breathing hurried, urine very highly colored, scrotum red and edematous, anus bulging, with an inflamed, angry appearance, and had bled from the wounds which it had received from an angered grandfather because of the apparent "bungling" of the grandmother, who had repeatedly failed to administer an enema. Neither had the grandfather's temper been improved by having an illegitimate heir thrust upon him. Babe had vomited repeatedly and had refused the nipple. My suspicions being now duly aroused, I explored the region with a soft rubber catheter, well oiled. The point of the instrument would enter very readily for the distance of about one inch upon all sides of a tumor-like projection of the rectum, which would press against the anal aperture with such force upon all efforts at defecation that the anus would be dilated about one-half inch. I reached for my pocket case, with the determination to make an opening with the knife, but found that I had none with me. Upon visiting the case later in the day I found all conditions exaggerated, enormous abdominal distension, breathing embarrassed, and infant too weak and in too much distress to cry. Lost no time in plunging knife into the blind extremity of the rectum; and before the hand could be removed from the range of this little human blunderbuss it had received the charge, which came with prodigious force and continued until an incredible quantity of fecal matter had been discharged, giving the little sufferer immediate relief. Thinking that he had emptied himself pretty effectually, I endeavored to introduce a pledget of gauze, but, to my sorrow, found this to be impracticable. Ordered tr. opii. camph. to relieve pain and produce quiet, and brandy to stimulate the weakling. I called next day and found the little fellow much brighter and better. He had had repeated evacuations during the night and bowels moved freely when it was examined. All previous bad symptoms had disappeared and indications were that babe would survive. And it did well for a few days, but fate and its relatives were against our rare patient. After suffering several days from an attack of parotitis, which disease was epidemic and in family at the time, the gland took on suppurative action, possibly from infection, which continued until death was caused from asthenia.

Cases of this deformity, although not novelties, are exceedingly rare. But few men meet them in a lifetime. Two cases of congenital imperforate anus are reported in the March, 1885, number of the *American Journal of Obstetrics*. In these cases the rectum opened into the vagina. The cases did not come under observation until the patients bore children. A variety of these cases are described in Kelsey's Diseases of the Rectum and Anus. The number of recorded cases is very small, in part owing to their being lost to statistics because of their not being reported. Dr. Zöhrer, of Vienna, met with two cases of imperforate anus in 50,000 new-born infants. Mr. Collins, in Dublin Lying-in Hospital, met with one case in 16,645 births.

Wharton, in Cyclopedia of Diseases of Children, says:

"Congenital malformations of the rectum and anus constitute a most interesting class of deformities, not only as regards their production, but also as regards their treatment; and it is essential that all medical men should be familiar with the different varieties of this malformation, as well as with their treatment, for in many cases the saving of life depends upon the promptness with which surgical aid is rendered.

"At its earliest commencement the alimentary canal consists of a simple sac or bag, developed from the innermost layer of the blastoderm, partly within and partly without the body, and in process of development this communication between the two portions of the sac is shut off and

Digitized by Google

the portion within the abdomen consists of a simple tube—the mesenteron—which terminates at the anterior extremity of the embryo in a blind pouch, while at the posterior extremity a similar pouch is formed. The cul-de-sac at the anterior extremity of the embryo comes in contact and communicates with an invagination of the epiblast, which is called the stomodeum, while a similar depression of the epiblast at the posterior extremity of the embryo, named the proctodeum, forms the anal orifice and communicates with the mesenteron.

"The greater portion of malformations of the rectum and anus are due to the latter stages in the process just described being incomplete, or, in other words, to an arrested or irregular development of the proctodeum or mesenteron."

GUAIACOL AND ITS USES.

By ALLEN F. MILLER, M. D.,
RANDOLPH, NEB.

Guaiacol has been used locally and internally as cure and relief in painful affections. It is an antipyretic when used either way. This effect when applied to the skin was first noticed by Dr. Desplates.* Dr. J. M. Da Costa applied it to the skin and noticed a marked reduction of temperature, without any change of pulse or cerebral disturbance. It has been used as an antipyretic in typhoid fever, pneumonia, tuberculosis, and rheumatism with good results. Guaiacol was originally proposed as a substitute for creosote in the treatment of phthisis, and to this family of disease I believe guaiacol is a remedy of great importance. According to Max Schiller (Berlin), it acts on all forms of tuberculosis, by affecting the tubercle bacillus, and is useful in external tubercle (including lupus) as well as surgical. It has been used by inhalation in phthisis, but is now generally administered in doses of two to three drops to children, and three to five drops to adults four times a day. It is claimed by good authorities that this drug does good in many cases of pulmonary tuberculosis, not by acting upon the bacillus, but by forming compounds in the blood with the toxic bye-products of the tubercle bacillus and aiding their elimination. In typhoid fever it is best used by rubbing into the skin of the abdomen every five or six hours, one-half drachm being used at each application.

My own experience with this drug has been more in surgical than in medical cases. A reference at this time to two cases treated with guaiacol may not be out of place:

Case I.—Mrs. H., age 25, married, presented herself to me June 1, 1894, with history of scrofula and consumption in her mother's family; pulse 90, temperature 100 F. I found an abscess just above the cricoid cartilage; also an enlargement of submaxillary and sublingual glands. There was a scar along the anterior margin of the left sterno-cleido-mastoid muscle, where suppurating glands had been removed three years before. They had been enlarged two years previous to their removal and were pronounced tuberculous by the surgeon at the time of the operation. The cicatrix and some of the surrounding integument was of the characteristic purple color usually seen in tuberculous cases. I prescribed at first four, later five, drops of guaiacol (Merck) in milk after meals. The enlarged glands were reduced to normal size in six weeks. The redness of the affected skin disappeared entirely. The use of the drug was continued for about five months. At present there is no evidence of any disease in this case.

Case II.—Male, German, 16 years of age, farmer. First consulted me October 3, 1894; had then been under some treatment for several months for scrofula. The cervical glands of the left side were very much enlarged, the enlargement extending from the parotid gland above to two inches below the body of the inferior maxillary and to the location of the canine tooth in front. Three of the glands were discharging pus and caseous material. Patient said his father died of consumption "one year ago." Temperature ranged from 100 to 101½ F. from day to day, pulse about 85. I ordered guaiacol to be taken as in previous case, also, locally, an unguent consisting of

Guaiacol	ʒ j,
Iodoform	ʒ ss,
Vaseline	q. s. ℥ j,

to be applied on gauze three times a day, after washing with warm sterilized water. In four weeks the glands were reduced in size more than one-half and the discharge had nearly subsided. Four weeks later the redness of the affected part had nearly disappeared. At present there are no enlarged glands to be found in this case. As in Case I, the treatment was continued several months.

Prof. Walter S. Haines, of Chicago, has used guaiacol in three cases of genito-urinary tuberculosis. In all of these it seemed to do some good, but did not effect a cure in any of them. From these cases and from his researches Professor Haines says: "I believe the remedy of some value in tuberculosis, perhaps not often curing the disease, but frequently retarding its progress."

Dr. Senn says: "I regard guaiacol and its preparations as the most effective remedy in the treatment of tuberculosis, regardless of the seat of the disease."

From the reports I have been able to secure, and from my own experience with the drug, I believe it the best remedy at our command in the treatment of tuberculosis. I find a large number of the profession have never given this drug a trial. I believe it should be given for at least six months in most cases. At Senn's clinic it is prescribed for patients from whom tuberculous

* Professor in medical faculty at Lille.

Digitized by Google

glands have been removed, and this clinic seems to be the great rendezvous for tuberculous patients.

As to just how the good results are obtained through the use of guaiacol I am not prepared to say, but when I can see my cases improve rapidly as soon as I begin the use of the drug, and remain apparently well for a period of two years, with no indication of a return of the disease, I am satisfied to continue its use.

OVARIAN TUMORS.

REPORT OF CLINIC GIVEN AT POST-GRADUATE MEDICAL SCHOOL.

BY FRANKLIN H. MARTIN, M. D.,
CHICAGO, ILL.,
PROFESSOR OF GYNECOLOGY, POST-GRADUATE MEDICAL SCHOOL; SURGEON TO WOMAN'S HOSPITAL.

[Reported by F. A. Besley, M. D., Chicago, for the WESTERN MEDICAL REVIEW.]

CASE I.—GENTLEMEN: The patient I expect to operate on before you to-day gives the following history:

Family History—Negative.

Personal History—Age of puberty 15; periods regular in girlhood; flow normal duration; some dysmenorrhea. Last fall flow became scanty, with a gradual return to normal amount at present. Last few periods have occurred every two weeks, without pain.

Previous History—Had diseases of childhood. Had pneumonia last February and has not been "well" since. Patient says her abdomen has been growing larger since that time.

Present Condition—No pelvic pain; occasional occipital headache. Two months ago urination was frequent and painful; normal at present. Bowels regular. Some leucorrhea.

Physical Examination—Mind clear. General nourishment poor. Eyes negative. Tongue coated, with red edges. Slight paleness of lip, indicating some anemia. Lungs negative. Heart dullness slightly increased to right. A soft blowing murmur can be heard at apex and transmitted to the left. Second pulmonic sound accentuated.

Abdomen—You will observe that the size and contour of the abdomen is about what we would expect to find in pregnancy at the seventh month.

Palpation—A relatively firm tumor can be outlined above the pubes, in the median line. It is smooth, freely movable, and apparently connected with some one of the pelvic organs. No fetal movement can be felt.

Auscultation—No sounds can be elicited.

Vaginal Examination, Patient Under an Anesthetic—Cervix is hard and small, and the uterus can be plainly outlined in front of this firm, smooth tumor, which is freely movable and lies above the brim of the pelvis.

If you will remember, gentlemen, this tumor was first noticed about six months ago, and has been gradually increasing in size to its present dimensions. This fact, in connection with its position and shape, should make us extremely cautious to exclude the possibility of a pregnant uterus. However, with the patient under an anesthetic, I can readily make out the uterus—small and firm—lying about in its normal position and in front of the tumor. Besides this, the patient has continued to menstruate—rather irregularly—since the beginning of the growth of the tumor. She has had no morning sickness and has never felt fetal movements. I believe we are dealing with a large ovarian cyst and I propose to do a celiotomy and remove it.

The anesthetic we are using is ether, for the reason that examination of the heart reveals a slight insufficiency of the mitral valve. Examination of the urine shows the normal amount of urea and no albumin and no tube casts.

In preparing the field of operation—in this case the abdomen of the patient—it is thoroughly scrubbed with green soap and water and then shaved. Alcohol or ether is then used to remove the fat and the parts carefully washed with a saturated solution of potassium permanganate, the stain being removed with a saturated solution of oxalic acid. A green soap compress is then applied and allowed to remain twenty-four hours, after which a bichlorid gauze dressing is placed over the surface. Just before making the incision the parts are again scrubbed with green soap and water, followed by ether and alcohol.

It is probably impossible to render the hands absolutely sterile, however—the disinfection must be made as nearly perfect as possible. This is accomplished in the following manner: The hands and forearms are vigorously scrubbed with green soap and water for at least fifteen minutes—the water being frequently changed—then in alcohol to dissolve off the fat and superficial epithelium—and finally washed in bichlorid, 1 to 2,000. The instruments are sterilized by boiling for at least twenty minutes. The sponges, dressings, sutures, etc., have all been exposed to a degree of heat high enough to kill all bacteria and their spores.

We now place the patient in the Trendelenburg position, so that the intestines will fall back out of harm's way. The incision is made a little to one side of the median line—about three inches long and extends well down to within one inch of the symphysis pubis. The first cut should divide all the tissues down to the deep fascia, being very careful to avoid a ragged wound, for uneven edges prevent perfect coaptation, offer less resistance to infection, and delay union. Having reached the deep fascia, it is divided and the rectus muscle exposed, the fibers of which are separated with the handle of the scalpel. The subperitoneal fat is now dissected back and the peritoneum picked up with two catch-forceps and divided between them with a scalpel, the small opening thus made being enlarged with a pair of scissors, taking care not to injure the bladder, in the lower angle of the wound.

You will notice as the incision in the peritoneum

Digitized by Google

is enlarged that the tumor bulges into the opening. It appears dark in color, semi-solid, with here and there a fluctuating area. I will now introduce this large trochar into the substance of the tumor and make an effort to evacuate the fluid, thereby reducing its size and rendering its delivery more easily accomplished. Very little fluid escapes, but by enlarging my abdominal incision upward I am able, by passing my hand posterior to the mass and breaking up a few adhesions, to deliver it intact. I find it to be a tumor springing from the left ovary, and I will proceed to remove it by tying off the broad ligament.

With this large curved pedicle needle, armed with strong antiseptic catgut, I first transfix the utero-ovarian ligament and second the infundibulo-pelvic ligament, and by so doing only wound fibrous structures. These being less vascular, the danger of the formation of a hematoma from capillary oozing is greatly reduced. The ligature is drawn tightly around the pedicle and securely tied. A strong forceps is placed on the pedicle and the tumor removed by severing the pedicle on the

Fig. 1.—Multilocular ovarian cyst.

distal side of the forceps. The catgut used is not only sterile, but antiseptic. It was found that catgut could be rendered aseptic by exposure to extreme heat or by boiling in alcohol—no cultures could be made from it; but when this same catgut was used in abdominal work it often became the seat of infection. This is explained by the fact that catgut itself acts as a most perfect culture medium, and we are never able to exclude absolutely all bacteria. It is necessary, therefore, to have our catgut antiseptic as well as aseptic. The method of preparation I employ is as follows:

The catgut is first cut into pieces about twenty-four inches long and soaked in ether for twenty-four hours to dissolve out the fat. It is then made aseptic by exposing it to a temperature of 280 degrees F. or by boiling it in alcohol under pressure. To complete the process it is made antiseptic by placing it in a 1 to 1,000 alcoholic solution of pyoctanin for forty-eight hours. Pyoctanin is a very harmless and at the same time a powerful germicide. The catgut thus prepared can be safely used. It is pliable and easy to tie, remaining in the tissues about two weeks.

Proceeding to the examination of the adnexa of the right side I find another cyst, about the size of a fist, occupying the right ovary. It is free from adhesions and easily delivered. The broad ligament is tied off in the same manner employed on the left side.

Lowering the patient from the Trendelenburg position, the toilet of the peritoneum is completed by removing all clots and fluid blood with dry sponges. You observe that the sponges are practically dry, indicating perfect hemostasis; therefore I deem drainage in this case unnecessary. Drawing the omentum carefully down over the intestines, I cover it with a medium-sized dry gauze pack, thus protecting it and the intestines from injury during the suturing of the abdominal wall. The sutures used in closing the wound are strong silk-worm gut, and they are made to include all of the structures which go to make up the abdominal wall. This method I believe decreases the liability of subsequent hernia by increasing the thickness of the abdominal wall along the line of union and forming a convex surface on the peritoneal side, which tends to turn the pressure of the intestines away from this weakened point. As I insert the needle the assistant catches the deep fascia with a forcep and draws it out, so that the cut edges of the fascia may be brought into apposition, thereby insuring union of this strong fibrous structure and giving additional strength to the cicatrix. After the deep sutures are tied I use a few superficial ones, so as to obtain perfect coaptation of the integument, for if even a small surface is allowed to heal by granulation it later becomes the seat of pain and a source of great annoyance to the patient. The wound is dressed with iodoform and iodoform gauze and adhesive straps applied. These adhesive straps serve a double purpose. They retain the dressings in place without allowing any slipping, and when properly applied relieve to a great extent the tension on the sutures. Unless indications of infection develop the wound is not disturbed until the fourth day, when the dressings are removed and the parts thoroughly washed with equal parts alcohol and 1 to 2,000 bichlorid. This same treatment is practiced every day until the eighth, when the stitches are removed. I believe by this method the number of stitch-hole abscesses is greatly diminished.

The patient is placed in a warm bed—well covered with blankets and surrounded by bottles filed with hot water. If the pulse becomes weak or she shows any signs of shock she will be given

Digitized by Google

strychnia and nitro-glycerine hypodermically. As soon as she recovers from the anesthetic she will be given small quantities of hot water, the amount being gradually increased, providing it does not produce vomiting. This overcomes the extreme thirst and fills up the blood vessels.

In the after-treatment following abdominal section the care of the bowels is of the greatest importance and demands careful attention. Small doses of strychnia will be administered for the first few days, its action being to increase peristalsis and thus prevent the accumulation of gas. At the end of twelve hours, if the gas does not pass freely, a small enema is given, containing glycerine 1 oz., mag. sulph. 1 oz., and water 1 oz. This usually affords the desired relief. Should it fail it is repeated and made more stimulating by the addition of a few drops of turpentine. The enemas given in this way are usually sufficient to produce a bowel movement, but if they are not successful at the end of forty-eight hours I order small, frequently repeated doses of calomel or mag. sulph. 1 dr., mag. cit. 1 dr., every two hours until the desired result is obtained.

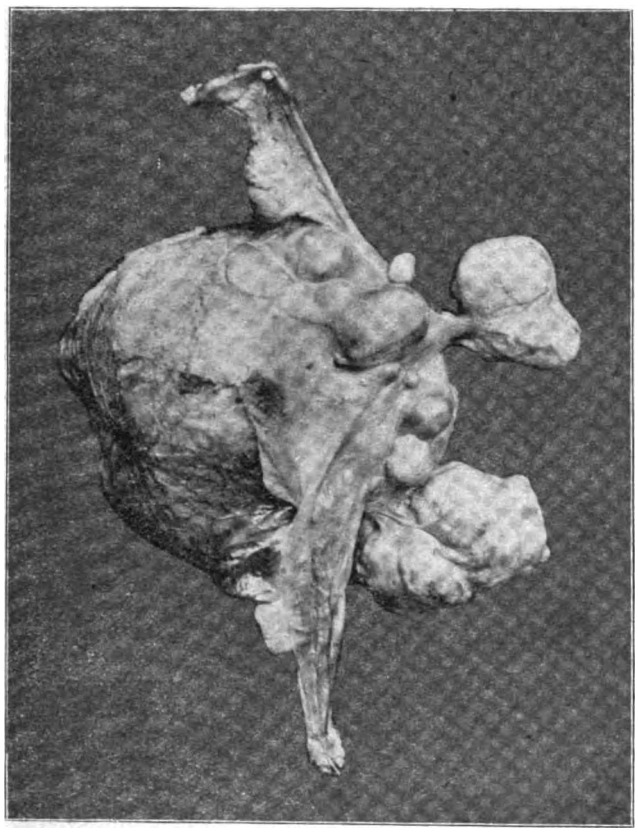


FIG. 2.—Cut showing multiple subperitoneal fibroids—posterior view.

CASE II.—The next case that I desire to present to you gives the following history: Mrs. R., age 44. She has had three children, the last pregnancy occurring twenty years ago. The age of puberty was 12. When a girl she suffered a good deal of pain through the entire menstrual flow, which usually lasted about a week. Complains of "nervousness" before and during flow.

Present Illness—About six months ago patient noticed an enlargement of the lower part of the abdomen and says it has slowly increased in size. During this time the menstrual flow has been increased. She has suffered with severe "backache," both in the lumbar region and between the shoulders. Some pain in right inguinal region. Micturition is frequent—more so at night. Bowels constipated. Right foot and lower extremity somewhat swollen. The region of tumor is tender on pressure.

The physical examination of this patient was negative, with the exception of the vaginal findings. With the patient under an anesthetic I was able to outline the uterus—it was very large, high in the pelvis, firm—and by bimanual palpation the fundus was found to contain several firm nodular enlargements. The diagnosis that has been made is uterine myoma and I propose to do an abdominal hysterectomy. The preliminary preparations for this operation are the same as for any abdominal section, which I have described in detail.

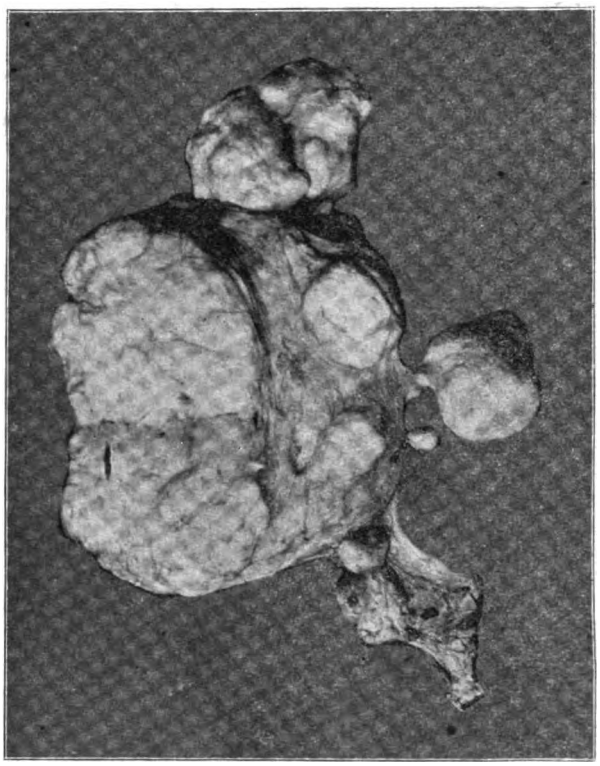


FIG. 3.—Cut section of subperitoneal fibroid.

In making the abdominal incision for a hysterectomy it should always be a liberal one, to allow of easy delivery of the tumor, and should extend downward to within one inch of the symphysis pubis. The bladder is sometimes found high, in which event the peritoneal incision is not made as low as the skin incision. The peritoneal cavity being opened, I pass my hand in posterior the tumor, which I find is not bound down by adhesions. Bringing it up into the incision, it is grasped with a strong vulsellum forceps and de-

Digitized by Google

livery is easily accomplished. With these large dry gauze packs the general peritoneal cavity is walled off and the intestines protected. The ovarian artery on one side is now located and secured with strong antiseptic catgut. A strong forceps is placed on the uterine side of this ligature and another still nearer the uterus, when the broad ligament is severed between the two forceps, the incision extending low enough to free the uterus down to the cervix, making the uterine artery easily accessible. Drawing the uterus to this side, the ovarian artery on the opposite side is treated in a similar manner and the broad ligament severed. With a scalpel I incise the peritoneum on the anterior surface of the uterus at the utero-vesicle fold, stripping it off the cervix anteriorly, being careful to thoroughly separate the bladder. A flap of peritoneum is also peeled off the posterior surface of the uterus, beginning at a point about one inch above the line where the cervix is to be amputated. Again drawing the tumor to one side and placing retractors on the opposite side, the uterine artery is located and safely ligated with strong antiseptic catgut. A strong forceps is placed on the uterine side of this ligature and the tissue between it and the uterus divided. Changing the position of the tumor, the artery on the other side is ligated. Having by this method safely guarded against hemorrhage, we are ready to remove the uterus by dividing the tissues at the cervix. This is best accomplished with a scalpel, beginning the incision on the anterior surface one inch above the vaginal junction and cutting downward and toward the cervical canal. A similar incision is made on the posterior surface, the cervical stump having the shape of a hollow wedge, with its apex at the canal. As the cervix is being severed the anterior and posterior flaps are grasped with strong-jawed forceps. The surrounding parts are carefully protected against infection from the cervical canal, and with this swab, dipped in 95 per cent. carbolic acid, I will cauterize the canal. With a probe I insert a strip of iodoform gauze through the cervical canal and down into the vagina. This acts as a drain and will be removed at the end of twenty-four hours. To close the stump I will unite the flaps with the Ferguson inversion stitch, which is an interrupted suture that does not penetrate the cut edges. In closing the peritoneum over the stump I will use a continuous suture of fine antiseptic catgut, beginning it at a point on the broad ligament corresponding to the position of the ligature on the ovarian artery, first uniting the cut edges of the ligament, then covering the stump with the flaps of peritoneum which were deflected before the cervix was divided, and finally uniting the cut edges of the opposite broad ligament. The suture ends at the point at which the ovarian artery of this side is ligated. You will observe that this makes a perfect peritoneal covering over all the raw surfaces, and greatly lessens the danger of the formation of adhesions, which often prove very painful. The patient is now lowered from the Trendelenburg position and the blood and clots sponged from the cavity. There is no fresh hemorrhage and it will not be necessary to employ drainage. I will now close the abdominal incision with strong silk-worm gut sutures, which are made to include all the layers of tissue which go to make up the abdominal wall. The wound is dressed and the patient put in bed. The after-treatment will be carried out along the same line as I described before.

EXAMINATION OF TUMORS.

This ovarian tumor, the first removed (see Fig. 1), is semi-solid, about 30 cms. in its long diameter and 20 cms. in its lesser diameter, with here and there fluctuating areas, puncture of which allows the escape of a clear yellowish fluid. Making a cross-section of the tumor, the cut surface reveals many pockets, or loculi, separated by firm fibrous bands. Some of these spaces are filled with a thin, clear, yellowish fluid, while others contain a thick gelatinous mass. The peculiarity of this tumor is that it is seldom we find an ovarian tumor of this size containing so large an amount of solid and semi-solid tissue. It is, however, a multilocular cyst of the ovary, in which the fibrous tissue predominates.

Examining the specimen removed from the second case (see Figs. 2 and 3), you notice that there are numerous subperitoneal fibroids, varying in size from about 2 cms. in diameter to 8 or 10 cms. in diameter. Splitting the mass longitudinally, we find the walls of the uterus are everywhere thickened, and occupying the cavity of the organ is what appears to be a submucous fibroid about 16 cms. in diameter. The tubes and ovaries seem to be normal.

COCAINE is readily soluble in olive or castor oil, but is not so in vaseline or lard.

"OH, doctor, we missed one of our silver spoons, and, as baby has been very cross all day, we want you to look through him and see if he has it in him."—*Life.*

VASELIN IN ERYSIPELAS.—Koester has been using vaselin in erysipelas for three years and studying its effects as compared with other remedies. He announces now that it is fully as efficacious as the rest, the fever lasts no longer, the lesions extend no more, and the complications occur with no greater frequency. It is therefore much to be preferred, as it is so simple and has none of the inconveniences inevitable with toxic and irritating substances.—*Revue Int. de M. et de Ch.*, August 25.

THIS number of the WESTERN MEDICAL REVIEW will come into the hands of many for the first time. It is a hint for you to subscribe. Will you take the hint? One dollar per year till January 1st.

Digitized by Google

ABSCESS OF THE NASAL SEPTUM, WITH REPORT OF FOUR CASES.*

BY F. S. OWEN, M.D.,

PROFESSOR OF RHINOLOGY AND LARYNGOLOGY IN THE OMAHA MEDICAL COLLEGE.

It is a noteworthy fact that no specialty throughout the domain of medicine and surgery has made greater strides in the past few years than that of rhinology. Where such activity has been shown, and such industry manifested in study and observation all along the line, it seems improbable that any disease could have failed to receive due consideration. A notable instance, however, is furnished in abscess of the nasal septum. While our journals have teemed with papers and discussions upon morbid growths, diseases of the ethmoid and accessory sinuses, the correction of deformities, etc., but scant reference has been made to the disease under discussion, and most authors of text-books who mention it at all fail to give it the consideration which its importance deserves.

Abscess of the septum may result from a variety of causes. Traumatism is by far the most frequent cause. A direct blow upon the nose may cause an extravasation of blood beneath the mucous membrane, the degeneration of which gives rise to the formation of pus; or the blow may cause a fracture or a separation of the two plates of the cartilage, or just sufficient solution of continuity of the parts to set going an inflammation, which is followed by abscess. Syphilitic perichondritis is perhaps next in frequency of causes. It may be a complication, also, of tubercular disease of the nose. Sir Morell Mackenzie relates a case where so-called idiopathic perichondritis followed an attack of typhoid fever. Lublinsky reports a case in a patient suffering from diabetes. General cachexy and debility was the apparent cause in a case reported by Dabney. Exposure to a cold draught of air, simple acute coryza, purulent rhinitis, diseased teeth, influenza, scarlet fever, etc., have been mentioned as causes, while cases have been reported without any assignable cause. It would be an interesting question to solve how important a role Jacobson's organ plays as a causative factor in some of these cases.

That this disease is of more frequent occurrence than the reported cases and the literature on the subject would lead us to suppose, I believe there is little doubt. It occurs in the majority of instances in early childhood and from slight traumatisms. The disturbances arising from it, in many of the cases, may cause no other symptoms than those accompanying a trifling injury, with the natural catarrhal conditions following it; or, if the injury be a severe one, which is rarely the case, the symptoms of abscess are very likely to be masked by others attending the injury; so that in either case, unless one is on a sharp lookout for abscess, it is very liable to escape notice. Therefore, on account of the absence of symptoms directly pointing to an abscess in many of the cases, and the general lack of attention directed to the affection in question, I think that we are safe in saying that no small percentage of the cases occurring go unrecognized.

Our text-books scarcely make mention of the deformities that may result from this disease, save those of perforations of the septum. MacDonald, in his text-book on diseases of the nose, seems to voice the opinion of others when he says that no fear will be entertained that abscess in this region, by leading to necrosis, will endanger the external configuration of the nose. My experience, and recent observations made by Gouguenheim, Roe, Dabney, Roy, and others, show that sinking in of the dorsum of the nose at the junction of the cartilaginous and bony septum, giving the nose a very unsightly appearance, is of very frequent occurrence. Especially is this true of the neglected cases. The following case is a good example of this class:

CASE I.—Mrs. M. B., aged 17, a strong, healthy-looking woman, came to my service at the Omaha Medical College, November 13th, 1894, on account of a deformity of the nose and some growths which were blocking up the nostrils. A physician had told her these growths were polypi and had strongly advised their removal, which so frightened the patient that she came a long distance to seek other advice. She gave the following history: Ten weeks prior to her visit she contracted what she supposed to be a severe cold, the most noticeable symptom of which being a stoppage of the nose. From the beginning there had been a free watery secretion from the nose, which she vainly tried to dislodge. Aside from an indefinable sense of fullness she had suffered no pain, nor was the nose swollen or tender to touch at any time. The nose began to flatten about the middle of the second month. There was no suspicion of syphilis or history of injury, and no scrofulous or other diathesis apparent, the patient being in perfect health. On examination the nose presented the deformity common to the late stage of these abscesses; flattened upon the face as if it had been struck upon the top with some small blunt instrument, just below the junction of the bony and cartilaginous frame-work. In each nostril could be seen a pale, pinkish swelling, completely blocking up the nostrils, necessitating mouth-breathing. On exploring the swelling with a probe it was found to be of a rather firm consistency, and did not pit or show signs of fluctuation; yet there were other signs sufficient to point with reasonable certainty to the presence of pus. A free incision was made on the right side, through a rather thick wall in the lower and anterior part of the swelling, from which a quantity of pus escaped. On exploring the cavity it was found to measure three-fourths of an inch in length, one-half inch in height, and one-half inch in width,

* Read before the Missouri Valley Medical Society.

Digitized by Google

and in it was felt a small fragment of loose cartilage. A small curette was then introduced, the cavity thoroughly curetted, and the piece of cartilage and other loose tissue removed through the opening. The cavity was then irrigated with a warm boric acid solution and a piece of iodoform gauze introduced for drainage, while each nasal fossa was tightly packed with gauze to approximate the two walls of the abscess and restore as much as possible the contour of the nose. Rapid healing took place. The artificial opening soon closed, leaving the septum, minus the cartilage, intact, but the deformity of the nose remained much the same.

A similar case was the following:

Case II.—Robert S., a lad of 9, was referred to me April 1st, 1895, by his family physician on account of a distressing obstruction of the nostrils and a profuse secretion from the nasal cavity. Five weeks previous to the time when I saw him he had risen from a sick-bed, to which he had been confined for six weeks with a severe attack of scarlet fever. When he commenced to run about his parents noticed a slight redness or rash in the right nostril, on which scabs would form, and which, aside from a desire to pick the scabs off, seemed to cause little or no discomfort. About ten days before consulting me a profuse mucopurulent secretion from both nostrils set in, and it was then first noticed that he could not breathe through the nose. There was no external swelling of the nose, and as he suffered no pain, it was thought to be nothing more serious than an ordinary coryza, and such home remedies as are usually employed in cases of that kind were resorted to, it is needless to say, without benefit. On examining his nose I found two large swellings, about the color of an hypertrophied inferior turbinal, filling each nostril, the one on the right being most prominent. With a probe I easily determined that they sprang from the septum, that they were doughy and exhibited the characteristic signs of doughy and exhibited the characteristic signs of an abscess. I made a free incision into the abscess on the right side and by pressure on the other side it was completely emptied, about a teaspoonful of pus being evacuated. In this instance a probe revealed a cavity one and three-fourths inches in length and one-half inch in height. After cleansing the cavity with an antiseptic solution and introducing a strip of iodoform gauze for drainage, a rubber tube was inserted into each nostril for support. The abscess cavity was thoroughly irrigated daily, good drainage maintained, and every effort made to promote healing and prevent deformity, but in spite of the most active efforts healing extended over a period of nearly three months and a considerable deformity took place. I examined the case eight months after its discharge and found little improvement in the external configuration of the nose. The septum presented a thickness double its normal, and a prominent horizontal crest extending for a distance of half an inch along the septum occupied the right nostril. Otherwise the organ was normal.

In the following cases treatment was followed by more satisfactory results:

Case III.—November 19th, 1895, I was called in consultation to see J. T., a boy four years of age, who was suffering from an obscure acute affection of the nose, causing great obstruction of the nostrils, pain, and some external redness and swelling of the nose. Nine days prior to this consultation the patient had fallen down some steps, striking upon his nose, causing it to bleed profusely. No further injury was noticed. The following night he was feverish and restless. His conditions meanwhile growing no better, his family physician was called on the third day following the injury. The symptoms noted then were those of an acute coryza. On the sixth day the nose was considerably blocked up and slight external puffiness and redness were noticed. The conditions grew progressively worse up to the ninth day, the date of my visit and the date of the operation. The patient suffered considerable pain, could not rest lying down, and there was elevation of temperature. On examination two large pinkish-yellow swellings could be seen blocking up the nostrils, the one in the left nostril protruding slightly externally. On palpation the swellings exhibited the characteristic symptoms of an abscess and were found to spring from the septum. Under an anesthetic the swelling on the left was freely incised at its lower portion and a quantity of pus escaped. By pressure upon the right side the cavity was completely emptied. The following day the cavity was reopened by passing a probe through the incision. Only a drop of a thin, watery fluid escaped. As the abscess walls were apparently already glued together, the cavity was not syringed. Healing was by first intention. Not a trace of deformity remained.

Case IV.—J. J., aged 16, applied for treatment at my clinic at the Omaha Medical College, March 4th, 1895, for stoppage in the nose. He gave the following history: Twelve days ago while at play he fell upon an iron rail, striking upon the tip of the nose and the upper lip. The skin was abraded on the lip, but the nose, save a slight hemorrhage, showed no external signs of injury. Pain in the nose was slight, but suffered considerable pain from the injury of the lip. No evidence of injury to nose until the third day following the accident, when it became so much occluded that he could not breathe through it or blow it. The stoppage in the nose has continued up to the date of visit. On the fourth, eighth, and twelfth days following the injury, suffered slight intermittent pains, referable to the right side of the nose, opposite the triangular cartilage. Externally the nose was normal in contour and exhibited no signs of injury on examination. The inferior turbinals were found on inspection to be greatly tumefied, and had it not been noticed that the septum presented an unusual thickness the symptoms would natu-

Digitized by Google

rally have been attributed simply to an attack of coryza. The septum showed a uniform thickness, except on the right side, well forward, there was slight bulging. In every part it was firm on pressure and presented no evidence of containing fluid; but in consideration of the suspicious appearance and the history of the case I deemed an incision the proper thing. I made a free incision through the bulging portion and to my delight a quantity of pus was evacuated. On passing a probe a cavity was found one inch in length and nine-sixteenths of an inch in height, the anterior limit being well forward. Much the same treatment was carried out as in the previous cases. Cavity irrigated daily and good drainage maintained. Special attention given to intranasal support. The case made a rapid recovery, leaving no external deformity. Saw the case yesterday, less than one month after the injury. The only evidence of the disease remaining is a somewhat thickened but uniform and intact septum.

ACUTE NASAL CATARRH; FROST-BITE OF THE AURICLE; FURUNCULOSIS; DIFFUSE INFLAMMATION OF THE EXTERNAL AUDITORY CANAL.*

BY SETH SCOTT BISHOP, M. D., LL. D.,

CHICAGO, ILL.,

PROFESSOR IN THE POST-GRADUATE SCHOOL, AND IN THE ILLINOIS MEDICAL COLLEGE, ETC.

GENTLEMEN: With the advent of cold weather our clinics demonstrate that this is the season for acute diseases of the respiratory passages, including the ear. The exposures suffered by the ill-clad and badly nourished portion of our population, whose powers of resistance to cold and disease are reduced by their unfortunate deprivations, are certain to provide us with an abundance of work and material for demonstration.

We have here a group of cases characteristic of this catarrh-producing climate. Several are suffering from acute rhinitis, or common cold in the head. This disease is of special interest to us as otologists, because it is the forerunner of inflammatory affections of the middle ear.

Simple acute rhinitis is an inflammation of the Schneiderian membrane of one or both nostrils. It is more common to childhood than to adult life, and the aged are rarely afflicted with it. Coryza, as it is commonly called, forms one of the symptoms of the eruptive fevers, and sometimes occasions more distress than the disease it accompanies.

The commonest cause is taking cold. The impression of cold on certain surfaces of the body appears to paralyze the inhibitory power of the vaso-motor nerves controlling the capillary circulation of the nasal mucous membrane. The most vulnerable surfaces are the back of the neck and head, and the feet. Wagner considers that rhinitic affections are in many cases due to the immigration of micro-organisms from the tonsils when they are diseased.

American houses and places of business are heated in cold weather by dry, hot air and kept at a temperature of 70 degrees F., or higher. The inmates are subjected to the action of this dry heat, often laden with dust and noxious gases, the greater part of every day. As a result the skin is very active in the performance of its functions and is kept moist by free perspiration. But, though constant exposure renders the soldier, Spartan-like, indifferent to cold and storms, housing the body makes it tender, like the hot-house plant, and sensitive to sudden and extreme changes in the air. After working all a winter day in a temperature of summer heat, these people pass out immediately into a frigid atmosphere, with the temperature perhaps from 40 to 70 degrees lower than that of the workshop. The skin is chilled, the perspiration checked, and a determination of blood to some internal organ occurs. Naso-pharyngeal catarrh is probably the most frequent consequence. This result is aggravated by high winds and the inhalation of dust. Indeed, a very large proportion of cases of nasal catarrh may be attributed to the irritating effects of dust, operating in conjunction with cold, damp air.

The manifestations of coryza are so familiar to you that it would be superfluous to enumerate them, but we must not pass over one of the most distressing of the symptoms, the nasal stenosis produced by the great swelling of the nasal membrane and the turbinated bodies. This interferes with swallowing as well as breathing. Respiration takes place entirely through the mouth, and the attempt to swallow liquids results in their being forced upwards into the nasal space, or even into the Eustachian tubes. The sense of smell is diminished or absent and the voice indicates the seat of the trouble. It has a characteristic nasal quality, and the sounds of "m" and "n" cannot be produced. The disease may extend to the antrum of Highmore, the frontal sinuses, the ethmoid or the sphenoid cells, or to the Eustachian tubes and tympanic cavities.

The most efficient treatment in my experience is one I introduced about sixteen years ago. It consists of the administration of a combination of morphia and atropia, to which I have added lately a portion of caffeine. For the sake of accuracy and convenience I have had Truax, Greene & Co. combine these remedies into the following little tablet:

Morphiæ sulphatis	gr. $\frac{1}{12}$
Atropiæ sulphatis	gr. $\frac{1}{300}$
Caffeinæ citratis	gr. $\frac{1}{8}$

The morphia relieves the pain and nervous irritability, suppresses the excessive secretions, and stimulates the circulation; the atropia elevates the tone of the blood vessels, quickens the pulse, decreases all the secretions except the urine, stimulates the respiratory center, and counteracts the

* Clinical lecture delivered at the Chicago Post-Graduate Medical School and Hospital.

Digitized by Google

constipating effects of the morphia; the caffeine stimulates the nervous centers and the kidneys, and diminishes the tendency of the morphia to produce nausea. The proper adaptation of this remedy to any given case causes the sneezing and hydrorrhea to cease; the nasal passages open up and the pain vanishes. More than this, attacks of coryza can be averted by the prompt employment of these tablets. On giving one of them at the onset of the attack the symptoms subside with as much certainty as can be affirmed of any medicinal specific. The effect of this remedy continues several hours, although the dose is small, and it should be repeated in two, four, or six hours if the symptoms begin to reappear. Perhaps it is needless to say that this remedy should not be given by means of prescriptions to patients. I have never allowed them to know the composition of it, and for this reason no patient has ever contracted a drug habit through my carelessness. It would be much better to give the tablets gratuitously than to run any risk whatever of becoming responsible for a harmful habit.

Spraying the nose with a three per cent. solution of camphor-menthol in lavolin affords great relief. Besides acting as a detergent and protective to the membrane, it contracts the capillary blood vessels, reduces swelling, relieves pain and fullness of the head, or stenosis, arrests sneezing, checks excessive discharges, corrects perverted secretions, and possesses antiseptic qualities.

The camphor-menthol inhaler gives much relief in mild attacks. It affords not only a very refreshing inhalent, but if employed as soon as the first nasal irritation is felt the symptoms may be checked.

An important preventive measure is the protection of the body from the vicissitudes of the weather. Fabrics of vegetable fiber, such as cotton and linen, should not be worn next to the skin. Animal fiber, such as woolen and silk, favors absorption and evaporation of the perspiration, and keeps the temperature of the surface of the body equable and prevents chilling. Woolen is preferable to silk, except in the hottest weather, when thick silk underwear affords more comfort and sufficient protection.

Frost-Bite of the Auricle.—We have here another evidence of the presence of winter weather. A glance at the auricle is sufficient for even the layman to pronounce a diagnosis of frost-bite. The chief object to be accomplished in treatment is to prevent a sudden disturbance of the circulation in the skin, by insuring a very gradual return to the normal temperature. This is best secured by the application of the aural ice-bag that I have devised for reducing inflammation of the mastoid process. It is filled with crushed ice and tied in position in contact with the auricle, after padding the post-auricular space for support. As the ice melts, the temperature of the bag gradually rises until the ice becomes water, and the temperature of the water slowly arrives at the normal bodily temperature. Then the auricle is dressed with a thick covering of an ointment consisting of equal parts of benzoinated oxide of zinc and carbolic acid ointment. This dressing is protected by gauze or absorbent cotton.

Furunculosis.—On examining this young girl you will find that movements of the auricle or of the tragus occasion her exquisite pain. Inspection of the auditory canal reveals a complete stenosis. Not the smallest ear funnel can be introduced. The swelling is most prominent on the anterio-superior wall, near the mouth of the meatus. Pressure with the cotton-protected probe discloses fluctuation. We have, then, a furuncle, or boil, a follicular or circumscribed inflammation of the external meatus.

Furuncles are for the most part limited to the cartilaginous portion of the ear canal, and most frequently to the posterior or anterior wall. Although they may be secondary to a middle-ear inflammation, they are essentially idiopathic in character. Furuncles appear singly, in groups, and in successive crops, and probably are due to the staphylococcus entering the hair follicle or sebaceous gland, or to some trophic change in the nervous supply of the meatus.

Any irritation of the canal predisposes to furunculosis: foreign bodies in the meatus; irritating instillations; ear spoons; discharges from the tympanic cavity; too frequent syringing, and vegetable parasites. The same may be said of a general impairment of the health, diabetes, anemia, and dyspepsia. The onset of the attack is attended with a sense of fullness or itching, followed by tenderness on touch, pains of a throbbing character, and, as the swelling increases, impaired hearing and subjective noises. The pain becomes intense for a day or two and subsides on the rupturing of the boil. Movements of the jaw increase the pain to such an extent that mastication is out of the question. When the furuncle is located on the anterior wall the tragus becomes red, swollen, prominent, and sensitive. When it is on the posterior wall the swelling may be sufficient to protrude the auricle and simulate the appearance of mastoid periostitis. Occasionally the cervical glands, and the lymphatic glands over the mastoid process, when they are present, become infiltrated. For the first two or three days the fever, headache, and furred tongue denote a general systemic disturbance. There is little or no difficulty in making a diagnosis if careful inspection is made with brilliant illumination. The probe easily detects the tender points and fluctuation. If there is not complete stenosis of the canal, hearing may not be diminished, providing the middle ear is not diseased. Furunculosis usually runs its course in about a week, and unless successive crops occur, or unless the general health is impaired, the trouble is over. But we must not forget that in certain instances the inflammation has invaded the tympanum, the mastoid process, and even the cranial cavity.

Digitized by Google

Treatment must first be directed toward relieving the pain, for which the bromidia internally and cocaine locally are effective, the former in teaspoonful doses in water every half hour or hour for an adult until pain ceases, and the cocaine in a warm ten per cent. solution locally. As soon as the pain is relieved we should cleanse the meatus with dioxide (peroxide) of hydrogen, comfortably warm. It can be warmed to a little above blood heat without impairing its effectiveness. Its effervescent action washes out the canal, and its antiseptic property strikes at the root of the trouble. After cleansing I have found a twenty per cent. solution of camphor-menthol in lavolin to exert a comforting and curative influence. It is to some degree a local anesthetic, antiseptic, and a constrictor of the capillary blood vessels. A twelve per cent. solution of carbolic acid in glycerine acts similarly. They are applied, like the cocaine, on cotton. As soon as distinct fluctuation can be made out the furuncle should be incised deeply through the center, under cocaine, and pressure exerted about the base to express all pus or necrotic tissue. Subsequent treatment consists in the application of a small amount of yellow oxide of mercury ointment, five grains to the ounce, salicylic acid ointment three per cent., or carbolic acid ointment. It may be necessary also, to address treatment to a depressed condition of the general health.

DIFFUSE INFLAMMATION OF THE EXTERNAL MEATUS.—On looking into this ear you will see that the canal walls present a diffused red, swollen appearance. They are tender to the touch with the cotton-armed probe, and the patient complains of pain in his ear. It is a case of diffuse inflammation of the meatus. This disease may be acute or chronic in character and may include the whole extent of the canal, although it is usually confined either to the osseous or to the cartilaginous portion. In my experience it has more often affected only that part of the meatus that adjoins the drum-head, and frequently it was limited to the superior half of the canal and invaded the membrana flaccida. If seen early the canal wall presents a bright-red and smooth aspect. When the inflammation becomes intense, and infiltration of the integument causes it to swell, the lumen of the canal is so encroached upon as to make an examination of the membrana tympani difficult or impossible. The walls then lie in contact with each other, and sometimes to such an extent as to render the introduction of the smallest funnel impracticable. When the drum-head is involved and can be seen it may look red and swollen and the hammer handle may be wholly invisible. A white coating of epidermis is frequently found lying loosely in the canal and can be easily detached and removed in casts. In an advanced stage ulceration and granulations are found.

Inquiry develops the fact that this patient has been in the habit of working at his ears with an ear spoon. We often find that these patients push toothpicks, hairpins, ear spoons, etc., far enough into the canal to injure the drum-head. They should always be warned not to put hard substances into their ears. It is a pernicious habit. The canal walls are bruised and irritated and a way is opened for the entrance of bacteria and parasites into the tissues. Instilling oils that become rancid, foreign bodies, etc., are also exciting causes of this disease.

In the first stage, or hyperemia, there may be no pain or impairment of function and the patient remains unconscious of any unusual condition except the itching. His attempts to relieve this only serve to increase the irritation, and as the inflammation progresses pain of a severe character is developed. The movements of the jaw and pressure about the ear aggravate the pain. With the occurrence of profuse transudation the hearing is dulled, and tinnitus and vertigo may ensue. The more copious the exudation the greater the stenosis and impairment of hearing. In old cases the canal is found full of an offensive, thick, greasy secretion. The diagnosis is not easily made out when the stenosis is great. It may be impossible to differentiate between an affection of the canal alone and one affecting both the canal and middle ear. A microscopical examination of the exfoliated epidermis for micrococci and vegetable fungi may clear up the diagnosis. The prognosis depends upon the extent of the inflammatory process. It may invade the tympanic cavity and produce a suppuration. It may extend to the bony walls and even to the mastoid cells and cranial cavity, but such results are rare. The lumen of the meatus may be permanently contracted or obstructed by adhesive processes. But the usual course under proper treatment is favorable.

We will instruct the nurse to syringe out this ear gently with a solution of bichloride of mercury, 1 to 5,000, as warm as can be borne comfortably. Then we will dry the canal with cotton on the holder, but without any friction, and cover the inflamed surface with aristol powder. To protect the ear from the cold winds a pledget of absorbent cotton will be placed lightly in the mouth of the canal.

In cases where the inflammation becomes very active and painful and the stenosis complete the ice-bag that I have designed for application in acute mastoiditis is effective. Abstraction of blood by leeches may give relief, two Spanish leeches being applied on the front of the tragus. A douche of a hot three per cent. solution of carbolic acid is excellent when the pain is intense, especially in view of the anesthetic action of the acid. If the aristol does not check the profuse secretion in a few days, pulverized boric acid may be substituted with advantage.

The consideration of the engrafting of vegetable parasites upon this disease and the resulting otomycosis, or ear mould, will engage our attention next.

Digitized by Google

TWO NEW NEEDLE-HOLDERS.

By GEO. HASLAM, M.D., M.R.C.S.,
FREMONT, NEB.

The accompanying cuts illustrate two needle-holders made for me some time ago by Messrs. Tiemann & Co. The larger instrument (Fig. 1) is nine inches and one-half in length, but the blades together measure only one-fourth of an inch in diameter. This instrument has proved very use-

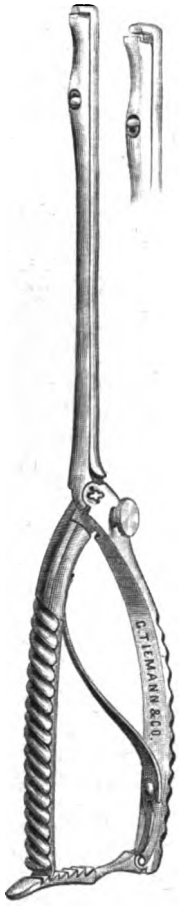


Fig. 1.

Fig. 2.

ful in suturing or catching on a needle and thread a bleeding point in any deep cavity. The view of the site of operation is unobstructed, either a Hagedorn or an ordinary needle may be held with equal facility, and lastly, there is no necessity of passing one jaw under the needle, as with most instruments.

Figure 2 represents a smaller instrument, fitted with the well-known automatic catch and designed for more superficial work. Both instruments are readily taken apart and cleaned.

Man with awful toothache meets a friend and tells him his woes.

The Friend—"Oh, I had just as bad a toothache as you yesterday, and I went home and my wife pitied me and kissed me and made so much of me that the toothache disappeared. You take my tip."

The Achyne—"Is your wife at home, do you think?"—*Woonsocket Reporter.*

URICACIDEMIA.*

By INEZ C. PHILBRICK, A.M., M.D.,
LINCOLN, NEB.

Achievement in modern medicine has been, in large part, along the lines of new interpretation of phenomena observed, perchance, centuries ago, when the life-habit of the race's infancy coaxed from Mother Nature many a secret vouchsafed only to intimate acquaintanceship—to the eye, ear, and touch responsive to the faintest message from the world-mystery without.

May we not believe that the same phenomena which led the methodists of Alexandria to employ but two classes of drugs—relaxants and astringents—were akin to, if not identical with, those by virtue of which Haig would associate migraine, chronic nephritis, and Raynaud's disease in a common causation? Or that the theory of putridity of the humors—blood, phlegm, bile, and black bile—of the humoralists is entirely explicable interpreted in the light of modern findings as regards uricacidemia? Can we infer differently than that observation of like phenomena dictated the baths, gymnastics, thermal and mineral waters of the Asclepiadæ, and determine our devotion to the Ling system, Nauheim, and Carlsbad? If our knowledge possess aught of novelty, it is, as Benjamin Ward Richardson puts it, that "it supplies a physiological basis for a practical procedure."

While new truths, knocking at the portals of the mind, receive at first stubborn refusal, then reluctant admission, once within, they beget an enthusiastic devotion vastly to their encouragement, and to forgetfulness of those who, through long sojourn within its walls, afford no longer the pleasurable stimulus pertaining to the new and strange. Fothergill affirms that the uric acid diathesis is not half so carefully studied now as half a century ago, or as it will be half a century hence. The investigation of the germ-causation of disease, given its first great impetus by the labors of a Pasteur, has during the last quarter-century largely occupied the entire field of medicine, to the exclusion of investigation of those diseases variously designated as constitutional, general, or unclassified.

Approaching our subject from the conservative point of view, yielding to uricacidemia only its undisputed realm of causation, we must admit the vast leverage which a knowledge, though far from absolute, of the subject affords in lifting the leaden weight of depression, irritability, and incapacity from a most refractory portion of the clientele of every physician. On the other hand, if, with Haig, we recognize in the regulation of the introduction and elimination of uric acid, control of a large part of the ills to which flesh is heir, placing in the category of its possible causation rheumatism, gout, epilepsy, migraine, Bright's disease, Raynaud's disease, angina pectoris, asthma, bronchitis, glycosuria, and the blood degenera-

* Read before the Lincoln Medical Society, November 24, 1896.

Digitized by Google

tions; if we consider it in its sociological aspect, its relation to mental depression, suicide, murder, its induction or encouragement of the drug habits; if we hold that temper, if not temperament, stands in sequential relation to uricacidemia; if we accept Fothergill's dictum that the cases of "pure cussedness" in children (and perhaps I may obey the spirit, if not the letter, by including men and women) have a like causation, or that of Haig, that we are making of ourselves carnivores who should be herbivores, to the vast detriment of the physical, mental, and moral well-being of the race, surely I may plead ample justification for bringing to the attention of the society an old subject in the guise of modern interpretation, one offering to the mind of speculative or forensic bent well-nigh unlimited scope.

The theoretical discussion of uricacidemia, that condition of the blood in which uric acid is present in greater than its physiological ratio, presents certain points of paramount interest:

First—Is uric acid a bye-product, as maintained by Fothergill? of independent origin, as held by Haig? or is the subject still sub judice, as affirmed by Osler? Of weight certainly is the testimony of Foster in the latest edition of his physiology, that "there is no evidence that uric acid is a necessary antecedent of urea; but that, on the contrary, all the facts go to show that uric acid is the result of a metabolism slightly differing from that leading to urea."

Second—Whence comes an excess of uric acid in the blood? From malassimilation, defective oxidation of the blood, and the ingestion of too large a quantity of stimulative food, in other words, imperfect metamorphoses, as held by Fothergill and Von Jaksch? Or is uric acid formation constant, the movable factor being the amount of uric acid introduced in food, together with the conditions determining its solubility, as held by Haig? Or does the truth lie with Osler, who here again holds conservative ground, maintaining that the condition in question is more one of defective elimination than of excessive formation? Or with Foster, who asserts, "Nor is there in man or the mammal any satisfactory physiological or clinical evidence that an increase of uric acid is the result of deficient oxidation"? Or with Dickinson, who thus indirectly affirms his allegiance to the theory of deficient oxidation: "For the diminution of uric acid, therefore, chemistry would indicate the introduction of more oxygen and less nitrogen, more air and less meat"? Or with Garrod, who, in so far as gout is concerned, recognizes three factors in causation—increased formation, retention, and individual peculiarity?

Third—In what tissues has uric acid its origin? Shall we accept the theory of its nephritic origin, with Garrod? Its origin in bone marrow and muscle, with Ebstein? Its hepatic origin, with Osler? Or the splenico-hepatic, with Foster?

Fourth—Does defective metabolism stand in sequential relation to uricacidemia; and if, with Metschnikoff, we would fain control disease through control of the metabolism of the white blood corpuscle, must we eliminate the uricacidemic factor?

Fifth—Is the so-called uric acid diathesis, a constitutional make-up, predisposing its possessor to uricacidemia, a condition of degeneracy marked by inability to perform the requisite metamorphoses, a myth or a reality? Or is defective metabolism both antecedent and post-cedent to the uricacidemic condition, an arc in a vicious circle, the increased alkalinity of blood in every condition of lowered metabolism, from whatever source, resulting in solution of available stores of uric acid, be they of retention or of introduction origin, the resulting capillary contraction, with hyperemia and stasis, resulting in still further retarded metabolism?

Whatever of answer may be vouchsafed these theoretical questionings, the practical bearings of the subject admit of no differences of opinion. My earliest gropings amidst therapeutic mazes in hospital wards, under wise counsel, impressed upon me the immense utility of potassium iodide and the salicylates in general and particular, and gradually the victim of chronic bronchitis or asthma assumed in my mind's eye the relationship of brother to him whose infirmities were of a locomotor rather than of a respiratory nature. My personal experience, limited, to be sure, has almost persuaded me that every woman is a uricacidemic to a greater or less degree—the victim of environment and occupation; and, reasoning by analogy, I am led to ask if uricacidemia stand not in good stead of becoming, if its installation be not already an accomplished fact, the American disease, the sequel of national hurry and consequent defective metabolism, or, as Osler puts it, of "an overworked, overfed, and consequently clogged machine."

In bad temper, mental depression, headaches, woman pays the penalty of indoor occupation, deficient exercise and oxygen. As Haig points out, woman, by virtue not only of life-habit, but as well of the periodic failure of nutrition attendant upon the catamenia, affords a more alkaline blood than man for the solution of uric acid. It is a matter of universal experience that, in woman, uricacidemic manifestations, from mental depression to migraine, or, if we accept their uricacidemic etiology, epileptic seizures, occur invariably in greatest severity at the menstrual epochs—the crests of the wave of Stephenson, or, as it should be designated, of Mary Putnam Jacobi, to whom Stephenson himself ascribes the merit of first elaboration of the idea. I am ever in favor of giving the devil, or a woman doctor, his or her due. In men the conditions are such as to favor the precipitation of uric acid, to the detriment of joint and muscle, if it be, I am open to conviction, to the benefit of temper.

The uricacidemia of infancy, evidenced in uric acid infarcts and uricaciduria, denominated by

Digitized by Google

Fothergill a reversion, a species of original sin, may be termed physiological, as may also, if we accept Haig's dictum, the physiological arteriosclerosis of old age, the legitimate sequence of years of high blood pressure—its causation, uricacidemia.

Of a large number of cases of uricacidemia in varied manifestation under my care during the past year, I have selected a few types. As regards diagnosis, I would say that it has been based on urinalysis, together with the symptomatology. I have not, owing to lack of apparatus, estimated quantitatively the ratio of uric acid to urea, a point upon which Haig so strongly insists.

Miss M. H., æt. 28, of English parentage, born in Nebraska. On maternal side of house, grandfather rheumatic; one uncle gouty; other members of family suffering from heart disease and sick headaches. Most of maternal relatives are farmers and not of nervous habit. On paternal side of house, grandfather rheumatic; an uncle dropsical; all members of family of nervous habit. Father of patient, whom she resembles, has always had poor health, having been advised change of climate; but, under quiet conditions of life, has lived in comparative comfort. As a child, patient was sallow and thin (I give mainly her own words); always tired and weak; troubled much with cough, earache, neuralgia in head and shoulders; and could not romp with other children. Had croup and pneumonia several times in early childhood. At about eight years of age a sensation of "tightness" in chest developed, and grew severe at thirteen years of age. Menstruation established at fourteen years of age; intervals between periods of irregular duration, generally from six to eight weeks. Asthmatic attacks lasting three days ushered in menstrual periods. At about eighteen years of age began to suffer with pain in occiput and top of head, and was twice treated locally for uterine disease, but without relief till a pessary was employed by myself. Ever since menstruation was established she has been exceedingly nervous, complaining of a feeling of "dread" and "wildness," and marked agoraphobia. Has always taken cold on the slightest pretext. Has been troubled much by frequent and peremptory desire to empty the bladder. Stomach has always been exceedingly irritable. Of late years persistent insomnia, cold, "dead-feeling" extremities, and muscular twitchings, especially in calves of legs, have made her nights unbearable. Before coming to me, early in the present year, kindly sent by another physician, she had been fitted with glasses to correct a muscular insufficiency which made close work impossible. Her physical condition at that time was as follows: Short, slight, sallow, mucous membranes very pale, heart sounds normal with the exception of what appeared to be a roughening of second sound at aortic valves; chest somewhat barrel-shaped; examination of lungs negative; pelvic examination revealed a slight anteflexion of uterus, with prolapsus of entire organ, together with consequent congestion. I employed intra-vaginal galvanism, with medicated tampons, for a month, and fitted a pessary, to the complete relief of pain in occiput, backache, and to the marked lessening of mental depression. Urinalyses at this time revealed a urine at some times of high specific gravity, great acidity, and excessive presence of urates, with scant secretion, and at others of low specific gravity, no precipitation on cooling, with abundant secretion. I did not at this time realize the full significance of her condition, but put her on sodium phosphate and later lithium citrate, together with an iron and strychnia tonic; ordered a cold sponge bath each morning and the regulation remedies for asthma, to be employed during the attack, which latter all failed signally in giving relief. Gradually her asthmatic attacks grew less frequent and severe; she gained in strength and finished her term in school with comparative comfort, missing occasional days from work. Menstrual intervals lessened somewhat in duration.

In midsummer, she came to me from her home in eastern Nebraska with the history of having been most wretched for some weeks, having suffered from almost absolute insomnia, great depression, and so forth. Her asthmatic attacks had not recurred. Urinalysis revealed abundant uric acid crystals, together with an excessive deposit of urates. Different drugs prescribed for her insomnia had signally failed. An ophthalmoscopic examination made at this time, and kindly reported for me, revealed right eye-ground dotted over with small, round pigment deposits, the blood vessels appearing normal. On temporal side of left eye-ground were to be seen four round, dark pigment deposits, two large and two small. Vision in left eye was quite defective and somewhat limited as to range. The significance of these deposits, whether in retina or choroid, whether due to hemorrhage, and whether the uricacidemic condition, with its high blood pressure, be a factor in causation, I leave to the decision of the specialist. I now ordered a course of Turkish baths and massage; restricted her diet absolutely as to meat and relatively as to carbohydrates; and put her upon potassium iodide and colchicum. Under this treatment she improved rapidly, slept and ate well, and gained strength and color; and wrote me a few weeks later from her home, to which she returned after two weeks, that she had enjoyed the first really well days in twenty-eight years, and that all had been comparatively comfortable. Learning from a recent letter that for a short time her mind had not been clear, especially in the morning, and that she had been greatly troubled with what she denominated rheumatic pains, I ordered a change to sodium salicylate, alternating with nitro-hydrochloric acid. She writes me that she has had much headache and burning of feet, with marked vertigo and tinnitus, since beginning the eliminative treatment. I await further particulars of her case, confident, as

Digitized by Google

I have told her, that I shall learn from time to time of her struggles with uric acid, in which now herself and now her arch-enemy will be temporarily triumphant.

A second patient, Mrs. B., who exhibits the ubiquitous pains and mental depression in marked degree, suffers from a chronic bronchitis, benefited alone by anti-lithic treatment. Her mother died from organic heart disease, and she herself exhibits a marked mitral-regurgitant murmur. Potassium iodide and colchicum, massage, and inhalations of oxygen have proven of greatest service in her case.

A third patient, Mrs. K., exhibits an eczema, together with an endometrial discharge, both controllable under anti-lithic treatment, and under no other. Her two children are eczematous, and the boy has been under my care for the treatment of rectal fissure.

The following history affords some points of especial interest: Miss M. G., æt. 38, of Scotch-Irish ancestry, born in Pennsylvania, for many years a teacher. Paternal grandparents died early in life. Maternal grandmother died from apoplexy, and maternal grandfather suddenly, from unknown cause. Father died at an advanced age, having suffered for many years with some form of kidney disease. Mother died in childbirth. Of a family of seven, three brothers and four sisters, five survive, and none save the patient exhibit the lithemic habit. One brother died from heart disease; another suffered all his life from rheumatism and died of typhoid fever at twenty-one years of age. Patient always enjoyed most excellent health until the fall of 1894. At the onset of two menstrual periods preceding the holiday vacation she was seized, while on the street, by excruciating pelvic pain of a lancinating character and carried into a physician's office, large doses of morphine, hypodermatically administered, alone giving relief. During the remainder of school year she suffered at the onset of the majority of menstrual periods with pain of like character, but less severe and lasting; and being forewarned, was forearmed in having the necessary remedy at hand. Very much exhausted at the end of a hard year's work as principal of the public school of a small town, she came to Lincoln to attend the summer school, and on the night of her arrival was seized by a most severe attack of facial neuralgia. While morphine gave patient partial relief, freedom from pain was not obtained for two weeks, various external applications being tried, together with the free internal administration of salol, phenacetin, and quinine. Pelvic examination revealing an anteflexion of uterus, with prolapsus and an abundant endometrial discharge, a dilatation and curettage were made and a pessary fitted; and after a brief vacation patient returned to a position in the public schools of Lincoln in greatly improved health. During the fall of 1895, patient reporting that the endometrial discharge was still profuse, and that she suffered much from pains in various muscles, and evidencing much discouragement, I made several careful urinalyses, all revealing large urate deposit, with, in some cases, uric acid crystals. I then restricted her diet (she had been a large meat eater) and put her upon potassium iodide and colchicum. Her health was excellent throughout remainder of the year. The night before the close of the spring term, after exceeding hard work in giving examinations and preparing for a closing entertainment, she was seized at 2 A. M. by a very severe asthmatic attack, lasting for several hours in spite of the administration of various remedies for her relief. A sense of chest-constriction remained for three days. While taking the potassium iodide and colchicum mixture there is no endometrial discharge, no muscle pain, and patient enjoys the best of health, and not only performs her arduous school duties, but takes several hours weekly of university work in addition.

The following case of migraine is of interest in the light it throws upon hereditary tendencies, and also from some points in its symptomatology:

X. Y., æt. 48, Canadian. Paternal grandfather died of apoplexy; paternal grandmother of pneumonia; maternal grandmother of apoplexy, and maternal grandfather of cancer of scrotum. Mother of patient, an exceedingly large woman, weighing three hundred pounds, was paralyzed some years before her death, aphasic for a few weeks following onset of paralysis and never regained her mental vigor. Father of patient paralyzed for twenty years previous to his death at ninety years of age, the condition ascribed by his physician to thrombosis. Amaurosis existed in his case for the last ten years. A sister and cousin of patient died of phthisis pulmonalis. As a child, on the slightest exertion or excitement patient suffered from so-called bilious attacks. Menstruation established at fourteen years of age and periods regular in recurrence. From fourteen to twenty-five years of age patient suffered with attacks of migraine at longer than monthly intervals, and seemingly not connected with the menstrual cycle. Since twenty-five years of age attacks have invariably accompanied the menstrual periods, and of late have occurred in intervals as well. Until three or four years ago pain invariably confined to left side of head; since that time on right as well, or on both alternately. For some years the duration of an attack never exceeded twenty-four hours; of late it has been thirty-six to forty-eight hours. The attacks are characterized by chills, vomiting, intense prostration, photophobia, and minute capillary hemorrhages dot the face. During the attack no effect is obtained from any drug taken by mouth, in however large quantities, absorption being nil. The influence of fatigue in their causation is very noticeable. Muscular insufficiency has been relieved by glasses; a retroversion of uterus corrected by pessary; and drugs legion, together with Turkish baths and massage, have been employed without avail, sali-

Digitized by Google

cylates having proven of greatest service. On a diet restricted absolutely as to meat, tea, and coffee patient has passed through the lightest attack in many years; and we hope for a cessation from the intense suffering which has exerted so baneful an influence upon her life.

Another case of migraine under my care dates the onset of her attacks to scarlet fever at seven years of age. There is now no evidence of organic disease of kidneys. The mother of another patient has suffered attacks of gall-stone colic at intervals for many years; a brother had attacks of migraine and died of pancreatic carcinoma, with general visceral involvement.

The following case I report with the kind permission of the physician in attendance:

The patient, a girl of twenty, was confined at the Milford Industrial Home eight months prior to the onset of the attack in question. The first symptoms of which the patient complained were pain over left kidney, along left ureter, and in bladder, which remained continuously severe. Patient did not urinate spontaneously throughout the attack, lasting two months, urine being drawn by catheter and varying from a pint in twenty-four hours to none at all. Urinalyses revealed a very acid urine, with uric acid crystals in small number; no albumin nor casts. Pulse and temperature remained normal until one evening about a month from onset of attack, when suddenly the mercury rose to the limit of the thermometer and remained there from 7 P. M. to 5 A. M., when it returned to normal and remained so for four weeks, when a similiar though shorter attack occurred. During the high temperature no urine was secreted, repeated catheterization revealing none in bladder. Symptoms gradually abated, and at the time when patient was lost sight of she was comparatively well. I would add that the range of temperature appearing incredible, three thermometers were employed by her physician with like result, and finally another physician was summoned from the village, who verified the result with his own thermometer.

A patient of my own, Mrs. H., under my care for pyosalpinx, a chronic intestinal catarrh, and fissured rectum, has during the two months I have had her under view had several hysterical attacks, marked by general muscular rigidity and great emotional disturbance, the urine at the expiration of which has invariably been loaded with urates and uric acid crystals.

Doctor—"What did your father and mother die of?" Applicant—"Well, sir, I can't say as I do 'zactly remember, but 'twarn't nothin' serious." —*Punch.*

High temperature is not a necessary feature of appendicitis. A case may run the whole gamut of perforation, abscess, peritonitis, and death while the thermometer never exceeds 99 degrees Fahrenheit. The pulse is a much safer guide.

Alimentary Tuberculosis.—Sinn (*Muenchener Medicinische Wochenschrift*, 1895, No. 37, 856) gives a detailed account of an interesting case of acute general miliary tuberculosis in a man thirty-eight years of age, in which the evidence points very strongly to an alimentary source of infection. The lungs showed no old lesions of the disease in any part. At the ileocelic junction there was a large cluster of cheesy mesenteric glands containing myriads of tubercle bacilli, while in the intestine near the ileo-cecal valve an old healed scar was believed to mark the site of the original ulcer through which the entrance of the infectious material had occurred. Above and below this point, in the small and large intestine, there were recent tuberculous ulcerations. Tubercles were also distributed along the course of the thoracic duct, whose lumen was in places completely filled by cheesy masses. Zinn believes that the bacilli were conveyed in the lymph from the original intestinal ulcer to the neighboring lymph-glands, the disintegration of which led to their further transport to the thoracic duct, through which they found entrance to the general circulation and gave rise to the general infection which caused the patient's death. The exact source of the original infection was uncertain, but milk is mentioned as a possible carrier of the bacilli.—*North American Practitioner.*

A Hard Case.—*Le Scalpel*, a very ably edited Belgian medical journal, now in its forty-ninth year, relates the following case as a warning to surgeons against trop de zele. A practitioner of Brussels had a patient who was suffering from a uterine affection. A specialist having been consulted, curettage was recommended and agreed to by both the woman and her husband. She accordingly entered an institution in order to undergo the operation, but while it was in progress the surgeon became aware, after dilatation of the cervix uteri, that he had to do with carcinoma. The patient being under the influence of an anesthetic and the husband absent, their consent could not be obtained; but the operator nevertheless decided to perform hysterectomy on his own responsibility. All at first went well, but unfortunately the woman died subsequently from hemorrhage, whereupon the husband sued the practitioner, claiming damages to the extent of 50,000 francs for the loss of his wife. The ministry of justice came to the conclusion that 5,000 francs would suffice; but at the time of writing judgment had not yet been pronounced. The case points to the inadvisability of performing such an operation as hysterectomy without the consent of the patient and her husband having been previously obtained. In the above case there is no reason why the operator, having ascertained the nature of the disease after dilatation of the cervix, should not have waited a few days before proceeding to remove the uterus.—*Gaillard's Medical Journal.*

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$2 00
Single copies..... 20

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, DECEMBER 15, 1896.

TO OUR READERS: A Merry Christmas and a happy and prosperous New Year. May the world during the coming year look to each one of you as fair and as beautiful as a garden of roses, and may the incense of your happiness be as sweet and as pleasant as the perfume from their petals.

THE report of the meeting of the Pan-American Congress in another column by Dr. Lowry, while long, is an extremely interesting paper. It is entirely different from ordinary reports of such meetings, which are usually dry, commonplace, uninteresting, and uninstructive. Dr. Lowry's report is the opposite of all these. To those who were fortunate enough to be present it will be doubly interesting.

ABOUT OURSELVES.

This number will complete the first volume of the WESTERN MEDICAL REVIEW. While the twelve months is not complete, we have thought it best to commence a new volume with the January number. The index for this volume will be issued with the January number. As we close this first volume we feel that we have done all and more than we promised in the initial number. We have gradually increased the size from twenty-four pages, the number in the first issue, to the present size of forty-eight pages. We have succeeded, we believe, in fulfilling the promise made in the first issue. We then said: "It is not published in the interest of any clique, of any college, of any hospital. It is not sent out to advertise any pharmaceutical house, or any publishing house, or any commercial enterprise whatever. We propose to publish a paper that will be welcome in the office of every practitioner of medicine, whether he be a specialist or whether he occupies the more honorable and more exalted position of a family physician. It will be the mouth-piece of the physician and surgeon of the new west. It will not be a cheap paper, either in its mechanical make-up or in its contents. Advertisements will be welcome and are solicited, but no advertisement will be allowed in any form among the reading matter. Neither will any advertisement be admitted that is in any way fraudulent."

We repeat: We believe we have lived up to our promise. And we have succeeded in getting the support of the profession far beyond our expectation, both in the way of subscriptions and in papers for publication. To these we return our best thanks. To those who have not given us their endorsement, we say, kindly subscribe. We will do you good, and you will do us good. We make no promise for the future except this: We shall continue to publish a first-class journal, in every sense of the word.

SECOND PAN-AMERICAN MEDICAL CONGRESS.

The meeting of the representative physicians of the New World recently held in its oldest important city, the City of Mexico, has been watched with much interest by the profession of the United States. Among the avowed objects of the congress the following may be mentioned: (1) the cultivation of a fraternal feeling; (2) consideration of the public health; (3) professional education in America; and (4) research in anthropology.

There are few more desirable features of such a meeting than the widening of the intellect and of the sympathies that result from travel and contact with cultivated men, especially if these men are of a different locality or nationality. These are sure antidotes for bigotry and intolerance. The central thought of the congress, however, has been the care of the public health. This, indeed, is a subject in which the profession has shown the greatest interest and activity; the most rapid progress during the past few decades having doubtless been made along the line of preventive medicine. Lord Palmerston received great praise for his courage when, in 1853, he sent his famous reply to the Presbytery of Edinburgh regarding the threatened outbreak of cholera in the city at the time. Palmerston insisted that far more depended upon natural laws than upon

Digitized by Google

prayer, and if the filth and other causes of the disease were not removed before the approach of warm weather pestilence would be sure to return in the spite of all the prayers and fastings of a united but inactive nation. It is difficult for us to comprehend that to make such a statement less than half a century ago required an unusual amount of moral courage. It only goes to show how rapid has been our progress of late in the evolutionary process which ordinarily counts time only by cycles. The creation of boards of health with competent health officers, by enforcing cleanliness, has saved untold misery and disease. Cleanliness alone, as enforced by the health officers, has proven a saving of life of more than one thousand annually, it has been estimated, in the city of New York. Multiply this by all the cities in the world and see what you have, and yet we do not hesitate to say that it is our opinion that the moral effect of such an example has done more to promote cleanliness than the law itself. Yet many can remember when Dr. Bowedge, of Boston, first urged the necessity of organization in this direction in our own country. This organization has now become general throughout Christendom.

Quarantine is another most effective means of checking the spread of disease and guards, as it should, every sea-board. We should bear in mind that it is the organized efforts that count. The front must be solid; the chain complete. It is this that makes it possible throughout the civilized world to prevent the spread of disease in any direction.

No one believes that such experiences will ever be repeated, as for instance the scourge of Athens so graphically described by Thucydides, or the one of the year 542 so wide-spread over the east, when 10,000 souls perished in a single day in Constantinople. Another instance is the one of Florence in 1348, the description of which, by Boccaccio, has become a classic. In 1664 and 1665 one-fourth of the population of the great city of London was swept away. Recall Rush's tragic recital of death and suffering caused by the epidemic of yellow fever in Philadelphia almost exactly one hundred years ago, and compare the promptness with which a threatened epidemic of cholera was suppressed which, if left to itself, would have rendered the World's fair at Chicago impracticable.

But we have not yet all we need. If, acting on the suggestion of Mr. Gamboa, international sanitary legislation could be procured, such as would not only insure the safety of the health of society, but also facilitate commerce and travel, a great point would be gained and intercourse between American republics in many ways encouraged. Reciprocity was doubtless that on which Franklin had his prophetic eye when he provided for the fullest elective course in Spanish in the University of Pennsylvania. It is a long way from Franklin to Blaine and the Second Pan-American Medical Congress, but evidently the old philosopher saw with more distinctness the needs of our commerce than many see on nearer approach.

Much could be said in praise of the rapid rise in the standard of medical education and the requirements urged for the degree of Doctor of Medicine. We will only remark, however, that the student who completes the academic and professional courses, demanded by some, and recommended by all medical schools, has to his credit one or two years' more of college training than is required by any other profession.

Since the American doctor is to be an educated man, and because of his special training, he is better fitted than any other class of scholars to thoroughly prosecute an investigation regarding the aborigines of the American continent. This will be apparent when we recall the fact that while anthropology, to some extent, lays all sciences under contribution it is imperative in its demands upon biology, anatomy and physiology—human and comparative, psychology, sociology, and ethnology. In all of which, with a single exception, the doctor has had special training, and what is quite as important is, that his entire career is conducive to the cultivation of the scientific frame of mind. It is to be hoped that the organized effort of the congress may result in adding much to American anthropology and to American scholarship.

THE HARVEY MEDICAL COLLEGE.

In another column will be found a letter from Dr. Byron Robinson, of Chicago, defending the Harvey Medical College of that city, and criticising our editorial in the October number of the REVIEW. Dr. Robinson asks: "Who conferred the power of judgment on the writer in the WESTERN MEDICAL REVIEW, hundreds of miles away, to announce that there are eighteen medical colleges in Chicago, and of these seven ought to be recognized, and no more?" No one, Dr. Robinson, no one. This country is a free one, where free speech and a free press are allowable. But is it not possible for a person at a distance to see bet-

Digitized by Google

ter, sometimes, than for those who are near? The majority of the physicians of the west, or a large minority, at least, find their medical alma mater in Chicago. Possibly the Harvey Medical College will find that not a few of her students will come from five hundred miles away from Chicago, and when she has got through with them and has dubbed them M. D., that they will go that far away before they swing their shingle to the restless breeze. And so, possibly, it is some of our business to inquire as to the standing of the colleges that are assuming the right to send men among us graced with what ought to be the honorable title of M. D., and whom we are to recognize as physicians and surgeons. Of course, if its laboratory has forty microscopes, and forty desks "with glass tops," and a "stereopticon lantern worth $300," it ought to be a good college. And then as to the faculty, that shows up well, too. Dr. Robinson and his wife, Dr. Lucy Waite, are a whole faculty in themselves, and if they will teach all the students of the Harvey College only half as much as either of them knows, they will have the honor of turning out some pretty well-informed men and women.

But the fact is no medical college whose teaching hours are from 7 to 10 P. M. ought to be recognized. What is the object? Is it to give a chance to those who are clerks or "work in slaughter houses" during the day to study medicine at night? There certainly can be no other reason for simply night work, unless it be to have a better chance to use that $300 stereopticon lantern. The majority of students find both night and day work, when attending college, if they keep up. After one has followed the ordinary occupation during the day, one is hardly in such a physical condition as might be supposed necessary to enjoy and absorb all the medical lore that would fall from the lips of even such a faculty as the Harvey is reported to have. It is doubtful if even Dr. Robinson, or his wife, could keep the weary eyelids from drooping. What Lincoln being a rail-splitter has to do with the Harvey Medical College, however, is beyond our comprehension. When Lincoln commenced studying law he stopped splitting rails. If there are more than seven medical colleges in Chicago that ought to be recognized, we certainly would not be willing to class any night school, whose hours are from 7 to 10 P. M., among them. No, not if it had the finest equipped building in the country, with a faculty consisting of the very pick of the profession. If Dr. Robinson will allow us to express ourselves just once more, we will say that any medical school whose hours are from 7 to 10 P. M. only is a fraud on the profession, a delusion for the student, and a snare to the unsophisticated.

MEDICAL ADVERTISING.

The subject of medical advertising is one that has created not a little dissension, personal feeling, acrimonious discussions in our societies, and not a small amount of professional enmity. The lay press, from purely selfish motives, defends the "advertising doctor," and does not see why a doctor should not advertise just as much as a merchant, a tailor, or any individual who has a commodity to sell. One daily paper recently said: "The medical profession is the only one of the great professions of law, medicine, and theology that is too bigoted to allow its members to advertise." The fact is members of neither the profession of law or theology ever think of advertising.

And why should not a doctor advertise? Is he not in the profession to make money? Is he practicing medicine for the love of it? Is he following the beck and call of every Tom, Dick, and Harry, Susan, Jane, and Mary, to all kinds of places, in every kind of weather, and at every hour of the day and night, just for the love of the work and for the love of humanity? Such there may be, possibly. So there may be members of the theological profession who preach for the love of the cause, and not because they get paid for it. There may be such in both professions, but they are not often met with.

But WHAT shall the physician advertise? Has he a commodity to sell of which he can brag, as the merchant who boasts of the quality and low price of his goods? Has he something to offer about which he can orate, which he, or his employes, makes, and for which he can claim superior workmanship or material, as can the carpenter, watchmaker, or tailor? Not at all. All that he can advertise, or brag about, or orate on is HIMSELF: his own knowledge, his own ability, and his own superiority above other men. This is egotism, self-conceit, vanity. It is pharisaism in medicine,—a most contemptible attribute. But there is one blessing. This kind of advertising does not pay in the long run. It may pay for a while, but only for a while. Vanity, self-conceit, egotism, and brag are individual attributes that are obnoxious to people, and while they may rush to patronize a self-glorifying quack for a time, it

Digitized by Google

does not take long for a revulsion of feeling to take place, and the quack moves on.

There is a legitimate as well as an illegitimate way of advertising, and the dividing line between the two is extremely thin and crooked, so thin that it is evidently not easily found by many well-meaning but ambitious gentlemen of the profession. To put one's card in a paper, giving one's location and office hours, may be legitimate, and probably is, but it does not pay, unless it be for the first few months in a new location. To "write to the papers" on medical subjects for the sake of getting free advertising may be legitimate, may be in accord with good taste, and may pay, but it is very doubtful. A very popular way of advertising, and one that, therefore, must be legitimate, is to become connected with some hospital, get one's name on the staff and have it well published. Still better is it if the words "medical college" can be added to or substituted for the word "hospital." Seriously, however, in this case the physician and surgeon has a chance to do strictly legitimate advertising, and in a strictly honorable way, by doing hard work, by doing good work. If connected with a college he will have the best of advertising, by keeping abreast with the most advanced in learning, by delivering lectures that shall be so instructive and interesting that the students in and out of college shall look upon him as a superior in learning and ability, in whatever branch he may be; whose lectures shall be so good that medical journals will be glad to publish them, and whose readers will be glad to read them. This is the grandest way of advertising, if it be called advertising, for these men become leaders and enlighteners, who need no advertising to bring them success.

While we may say that all the advertising a physician needs who is beginning practice in a place where there are many well qualified and well established men is to be thoroughly prepared and well qualified, still practically we know too well that this is not a fact. Let him get settled in a good location, with a neat office, with his books and instruments around him, how shall he get a practice? Not by sitting in his office, reading and studying, waiting, like Dickens' Micawber, for something to turn up. Something may turn up some day, some way, but he may starve or die before the turning commences. In this age of competition, in medicine, alas! as well as in everything else, the man who waits for something to turn up and does not do the turning himself will find, when it is too late, that he has been left, that he has failed. The first thing he will do, if he is wise, is to proceed to push himself forward, to make himself known. Acquaintance is what he wants first. He will get it in various ways. If he is of a religious turn of mind, or thinks he is, he will not forget to attend church. He will not be at all backward about getting elected superintendent of the Sunday school, or some other position which will bring him before the people. This is legitimate advertising, provided he is in earnest and his conscience will allow him to do it. It is not necessary that he should arrange to be called out during the service; that dodge has been worked to death. If he belongs to a lodge, attending to his lodge duties won't hurt him, at the same time he is making himself known. Society has a claim on every man, and by the doctor attending to his social duties he will probably impress someone with the idea that he will be a good physician to call in when he becomes ill. By making himself agreeable to all whom he may meet, without overdoing it; by dressing neatly and being cleanly; by driving a good horse and buggy if he can afford it; by being a GENTLEMAN at all times, in all places, and under all circumstances,—these are legitimate and honorable methods of advertising. It is advertising that costs nothing, but it is advertising that pays. The conscientious physician, the honorable physician, the self-respecting physician will advertise in this way and no other. With natural ability, a good education, and thorough preparation for his professional work, and an acquaintance among his fellows, he needs no egotistical puffs, free or paid for, in any advertising medium to bring success, which in this case means a good practice.

TIGHT BANDS.—It matters not whether it be the collar, the waist-band, or the garter, all constricting bands are injurious; anything that compresses the blood vessels and interferes with the free circulation of the blood should not be tolerated. Headache, chronic digestion of the brain, even apoplexy, will be favored and rendered more possible by the use of tight collars; while varicose veins are commonly caused by tight garters. Anything constricting the waist is evidently and obviously injurious to the vital organs within, all of which require plenty of room that they may functionate properly. We think it barbarous for Chinese women to constrict their feet; Li Hung Chang thinks it more barbarous for Americans to constrict their necks, waists, and legs; the old man is right; there are no vital organs in the feet.—*Annals of Hygiene.*

Digitized by Google

Notes and News.

CHILD life insurance is child death insurance.

THE Nebraska State Board of Health held no meeting this month, consequently we have no report in this issue.

A PHYSICIAN of Cincinnati recently sent a dunning card to a delinquent patient and was fined $100 for his enterprise.

DR. J. S. WINTERMUTE, of Tacoma, Washington, was shot and killed by one of his patients, who was suffering from melancholia.

DR. FRANK P. NORBURY, the managing editor of the *Medical Fortnightly*, has become the medical superintendent of the Oaklawn Private Retreat for the Insane, at Jacksonville, Illinois.

DR. HARREY, a Scotch physician, is reported to be using carrier pigeons in his practice. He takes one or more with him on his rounds and leaves them with those patients from whom he wants to hear.

THE profession of London, England, came very near losing another member during the past month. Sir William MacCormac has been quite ill with pneumonia, and for several days his life was dispaired of.

A committee, representing the three schools of medicine, has been meeting to agree upon amendments to the present Nebraska medical law. Nothing definite has yet been agreed upon, except that a four years course shall be demanded hereafter.

A UNIQUE organization has been formed in Minneapolis, which is to be known as the Medical Club of Minneapolis. It is composed of young practitioners of the city, who have not been in practice more than five years, all others being barred. The object is partly social and partly educational.

ACCORDING to the *National Medical Review*, there is one physician to about every 613 of population for the whole United States. Of all the states and territories of the United States the District of Columbia takes the lead in the ratio of physicians to population, this being as 1 to 264.2. The nearest to this is California, which is 1 to 383.4; then Colorado, 1 to 449.

THE number of cases already reported of dermatitis from the use of the Röntgen ray proves conclusively that there is a danger in it that was not thought of in its earlier use. One or two of the cases reported have been decidedly disastrous. It seems to be the opinion of those who have made a study of these untoward results that they are either from the body being brought too close to the vacuum tube, from too long exposure, or from using electricity of too high tension. Either or all of these causes may be avoided, and probably will be in the future.

DR. S. T. MERCER, of Larned, Kansas, claims to be "the original Bryan man." He was the attending physician and says the boy came into the world howling and kicking and has been keeping it up ever since. The *North American Medical Review* is our authority for this.

"IAN MACLAREN," otherwise Rev. John Watson, D. D., whose beautiful description of the rugged old Scotch "Dr. McClure" would have made him famous had he written nothing else, preached to medical men and medical students in New York, Sunday, November 6th.

TYPHOID fever is prevalent in Denver and in the immediate country adjoining that city. The cause seems to be hard to define. The Denver *Medical Times* frankly confesses it does not know, but that last summer, when they had a great deal of rain, and during other seasons when there had been a great amount of rain, the number of typhoid cases was small. This year the city, as to its streets, alleys, etc., is unusually dirty, unusually foul and filthy; it is unprecedentedly so. The dry weather, that is, the small amount of rainfall, leaves all of this filth near the surface, and the little rain that they get, or the occasional big rain, readily washes the filth, containing typhoid germs or otherwise, into the water supplies. During a dry season, such as they have had this year, a wise health commissioner would have had the city unusually clean, would have taken unusual precautions to prevent typhoid fever. A great abundance of rainfall gives rise, not only to thorough flushing and cleaning of our streets and alleys, but it produces deep soil drainage.

ANOTHER death is reported from antitoxin. Miss Florence Beckwith, of Mt. Pleasant, Iowa, died on December 2d in five minutes after the injection of the serum. Dr. O. A. Geeseka, the consultant in the case, published the following statement, which is endorsed by the physician in attendance: "I was called to see Miss Beckwith, together with the regular family physician, on the morning of December 2d, and found the following conditions: Temperature, 102 1-5; pulse, 95, regular but not strong; respirations, 30; otherwise not apparently different from normal; tongue somewhat coated; glands of neck slightly enlarged; general appearance of languor or depression. Local examination of the throat showed extensive congestion of the tonsils, fauces, and contiguous parts. The surface of the right tonsil presented a circumscribed membrane about one-quarter by three-quarters of an inch in size. Patient complained of malaise for last two days, which was attributed to the excitement and grief incident to the death of her aunt, Mrs. Bean, to whom she was greatly attached. She also complained of sore throat, difficulty in respiration, but that the latter had subsided. Our diagnosis was diphtheria and on consultation it was deemed advisable to use antitoxin. Captain Beckwith, the father of the patient, was informed of our con-

Digitized by Google

clusions and told that the injection of antitoxin was not free from some danger, and his consent to its use obtained. The syringe was sterilized by thoroughly boiling and the left side, where the injection was made, was carefully cleaned in the usual manner. The antitoxin container was found with the seal unbroken, and when drawn into the syringe was perfectly clear and normal to all appearance. The air was carefully expelled and the injection made by pinching up a fold of the skin and slowly injecting the antitoxin, absorbent cotton placed over the point of injection, and the same confined with adhesive plaster. Immediately she complained of a strange feeling in her head, and of itching of the entire surface of the body, as in nettle rash, and, in her next breath, of pain in her throat, then of her lungs, and then of her old trouble, asthma. I examined her pulse immediately, but could distinguish no beating. The usual heart stimulants—strychnia, nitroglycerine, and digitalis, were administered hypodermically, friction, electricity, etc., but all to no purpose. She died of cardiac paralysis." The serum used was Mulford's extra potential, strength 500 units per cc., dose 2,000 units. The serum had been received the day before from the laboratory. Certain papers have made plenty of use of this to decry the use of antitoxin, and a few of the members of the medical profession, who have been opposed to the treatment, have not been at all backward in publishing their views. Nothing is said about the thousands of cases which have been cured, but this one death will be heralded over the world by the medical agnostic.

Correspondence.

THE CONTROVERSY OVER THE HARVEY MEDICAL COLLEGE OF CHICAGO.

Chicago, November 23, 1896.

To the Editor: Some time ago a discussion was started in the medical journals in regard to Harvey Medical College of Chicago. In refutation of public statements we simply wish to state a few facts.

The Harvey Medical College of Chicago is an evening school, co-educational, as regards both pupil and professor. It has a graded four-year course of nine months each year. The instruction is given from 7 to 10 P. M. Under the present management, which has controlled it for the past two years, over one hundred students have matriculated, seventeen have come up for graduation, and seven failed to pass the examination. The college has graduated only ten students in the past two years. Of the ten students who graduated, three have diplomas from the Chicago Dental College, with medical attendance of one year at Rush and two years at the Harvey. One was from a recognized dental college in Tennessee, and attended a medical school in Iowa and spent one year in Harvey. Four students spent four years in the Harvey. One spent two years at the Detroit Medical College, one year at the Harvey, and had two preceptors' certificates. One spent his time in a New York medical college and in Rush, with accepted credits from Rush as a senior. This student left Rush for financial reasons, entering the Harvey about January and graduating the following June. This is the student, no doubt, to whom the writer, evidently uninformed, refers as having graduated in six months from the Harvey, and from which he generalizes the statement that Harvey graduates students in six months. Does this show a disposition to place the Harvey Medical College in its true light before the public? One member of the Harvey freshman class entered a prominent day school as a junior while his classmates were still sophomores in the Harvey. He is now a senior in the day school, while his classmates are still juniors in the Harvey. This surely does not show a disposition on the part of Harvey College to rush students through their course to an easy and early graduation. One Harvey freshman passed the entrance sophomore examination of the Chicago Medical College with excellent marks, as the Chicago Medical accepts credits from no medical school. Harvey College is teaching more than the number of hours required by the Board of Health. What about the so-called standard medical colleges who teach half a day for six months, *i. e.*, four hours a day? Harvey College teaches 648 hours a year, minus the customary holidays, while the six-months colleges teach 576 hours a year. What is the difference between four hours a day for six months and three hours a day for nine months? Is not the difference in favor of the nine months?

Harvey Medical College has some of the finest laboratory equipments of any medical college in Chicago. It has forty microscopes and forty individual laboratory desks, with plate glass tops, prepared especially with reference to bacteriologic work. It has a stereopticon lantern worth $300. The laboratory equipments in the Harvey are valued at $3,500 to $4,000. The practical anatomy rooms have all asphalt floors, with special drains. In the storage room the bodies are embalmed and each laid away on a shelf until needed for dissecting and other purposes.

In a conference of medical colleges in regard to entrance examination of students by a state board independent of colleges, the Harvey representative was the only one who unreservedly favored this change. It was stated that many students graduate at the Harvey without having witnessed a single capital operation at the college. Where is it customary to make capital operations in the colleges before students? Are not such operations generally performed in affiliated hospitals? To my own certain knowledge, dozens of capital operations have been performed before the Harvey College classes in hospitals affiliated with the college through the faculty members. The fact is that every one of the graduates of the Harvey

Digitized by Google

Medical College saw many capital operations in the Harvey Hospital, which was in the former college building.

It was also stated that "the facilities of the school are of the most limited kind." This statement is absolutely unfounded in fact. The school occupies three floors of a large building expressly arranged for the use of the college, after designs approved by the directors, and the building has been named after the Harvey College and is now known as the Harvey Building in all real estate records.

Who are the teachers connected with Harvey College, that they should be agents of a "diploma mill"? Does Dr. Eckley need to be advertised as anatomist? Is Dr. Clevenger not known by his writings and teachings? Dr. Evans of the P. and S. taught pathology last year. Dr. Coulter teaches rhinology, Dr. Lucy Waite teaches gynecology, and Dr. Knapp is in charge of the laboratory. In short, the faculty consists of a body of fifty reputable men and women, who are giving intelligent and thorough modern medical instruction.

In regard to the sensational statement that men and women are induced to leave the "work-shop and stock-yards, where they slaughter cattle, for the more remunerative occupation of slaughtering mankind," we leave to the good sense of the medical profession. Was not Lincoln a rail-splitter? Does this age impale men and women for previous condition of servitude? Beside, the time of the day in which a fact is acquired does not alter the value of the fact. Respectable and reliable knowledge can be acquired after sundown.

The article states that it is the purpose of Harvey Medical College to defeat the Medical Practice Act. Do the facts which I have presented go to prove such an assertion? On the other hand, I wish to state emphatically that Harvey College has one of the most systematic and detailed four-years graded course in Chicago.

These facts can be ascertained by any one with sufficient interest to investigate. Searching examination and investigation is invited at the Harvey College. Senior students in the Harvey have obligatory day-time work. During the past two years every senior saw one or more labors. In 1896 and 1897 in Harvey Medical College every senior will be obliged to witness at least ten labors. In general, what medical school does more for its students? In the light of the above facts, does Harvey College appear to be a "diploma mill"?

Who conferred the power of judgment on the writer in the WESTERN MEDICAL REVIEW, hundreds of miles away, to announce that there are eighteen medical colleges in Chicago, and of these seven ought to be recognized, and no more?

The management of the Harvey College have never considered it necessary to answer unfounded and unreliable public utterances, that its methods of teaching are no secrets, but open to public scrutiny. But since I am a teacher of gynecology and abdominal surgery in the Harvey College, I take the opportunity of laying before the innocent the above facts, so that the appearance of evil may not arise.

Again, I would request those journals which have entertained the ideas in the heretofore published articles in regard to Harvey College to copy this article in the interest of truth and justice.

Respectfully, BYRON ROBINSON, M. D.

WE gladly give space to the following letter, and congratulate Dr. Kelly on the fact that our remarks were based on unreliable information:

BALTIMORE, November 24, 1896.

To the Editor of the Western Medical Review—DEAR SIR: I observe in your recent issue, Vol. I, No. 7, page 187, a statement that I have been overworked and away on a holiday, which I should be very glad to have you correct. After taking no holiday for three years, I simply spent the summer in Idaho and Wyoming hunting, and am now back at my work again, doing more than ever and feeling as well as I ever felt in my life, in evidence of which I should be very happy to welcome you any time this winter you may be able to come on. Believe me, with best wishes for your excellent journal, Sincerely yours, HOWARD A. KELLY.

Society Proceedings.

THE Lincoln Medical Society, at its annual meeting, held November 8th, elected the following officers for the ensuing year: President, Dr. M. H. Garten; vice president, Dr. J. T. Hay; secretary and treasurer, Dr. A. D. Wilkinson. Meetings are held on the second and fourth Tuesday of each month, except during June, July, August, and September, during which months no meetings are held.

KANSAS CITY, MO., December 5, 1896.

Editor Western Medical Review: The Western Ophthalmological, Otological, Laryngological, and Rhinological Association meets in St. Louis on Thursday and Friday, April 1st and 2d, 1897. Programs will be mailed February 1, 1897. Physicians desiring to read papers are urged to send subjects to secretary at once. The railroads have promised one and one-third fare on usual certificate plan. Nebraska physicians are cordially invited to attend. HAL FOSTER,
Secretary.

To the Editor of the Western Medical Review—DEAR DOCTOR: The fifth annual meeting of the Western Surgical and Gynecological Association will be held at Topeka, Kansas, Monday and Tuesday, December 28th and 29th, 1896. We desire to extend to all regular physicians and surgeons a cordial invitation to be present and take a part in the proceedings. Topeka is a delightful city,

Digitized by Google

noted for its hospitality, and the local profession have arranged for our entertainment. A strong programme is assured. Opening session at 1 P. M. December 28th.

H. E. Pearse,
Secretary.

OMAHA MEDICAL SOCIETY.

The regular semi-monthly meeting was held December 8, 1896, President Dr. A. F. Jonas in the chair.

Dr. A. B. Somers read a paper on "The Beginnings of Disease," which will be published in the next number of the Review.

Dr. J. E. Summers read a paper on "Gall Stones," of which the following is a brief synopsis:

The writer dwelt upon gall stones impacted in the common bile duct, also explained the so-called "ball vale" action of floating choledochus stones. The difficulties and technique of operations in such cases were explained, being illustrated by a report of three cases successfully operated upon. The danger of delay in operation was emphasized, also the fact that although the exposure and drainage of a gall bladder was a simple procedure, and did not require any special amount of skill or surgical experience, the exposure and incision of the common bile duct for the removal of one or more gall stones required an accurate knowledge of the anatomy involved, and the suture of the incised duct, together with the precautionary protection of the peritoneal cavity from infection and possible bile leakage, were matters of difficulty, even to the experienced abdominal surgeon. The advantages and indications for the use of the Murphy button in gall bladder surgery were discussed. Dr. Summers is of the opinion that many lives might be saved if physicians having patients under their care, suffering from the effects of gall stones obstructing the bile ducts, did not too long delay in recommending relief by operation. The doctor was also of the opinion that life could be prolonged many months in cases of malignant growth obstructing the common bile duct if a cholecystenterostomy was made early, joining either the duodenum or transverse colon with the gall bladder.

Dr. J. P. Lord's paper was a "Report of a Case of Branchial Cyst." Branchial cyst, the doctor said, is a very rare affection, and is much less often seen than branchial fistulæ, which have the same etiology, except that in the former nature, in the process of development of the embryo, accomplished a superficial closure between the folds of the branchial arches and left unobliterated a matrix of epithelial elements, which, springing into activity at some future time, produce a tumor, the contents of which will vary with the variable histological structure of the cyst wall and with the progressive and retrogressive periods which may characterize its development. (See Senn on Tumors.) These tumors are most often seen in subjects from six to thirty years of age. The period of puberty, with its increase of functional activity, favors their development. They have been observed in subjects forty, fifty, and sixty years of age. My case was forty. They occur more frequently in women; my case was in a woman and upon the right side, which is rare, they being commonly upon the left. They are found in four points in the neck corresponding to the former site of the branchial clefts. The second and third are the most frequent locations. Least common in the fourth, the site in our case, and consequently below the larynx. The case in hand was of especial interest to me, because it had been repeatedly mistaken for cystic goitre by prominent physicians covering the period of its development, eight years. This diagnosis was rejected by me because the tumor was more laterally located. The pressure upon the trachea was from the side and not overriding the trachea, as in bronchocele; and in deglutition it was not lifted with the larynx and trachea, as is characteristic of goitre. Fluctuation proved its cystic character, and hypodermic aspiration showed its contents to be serous. Extirpation of the cyst wall was recommended, which treatment is endorsed by the majority of the authorities, but radical operative interference was refused. Aspiration was requested by the patient for relief of the pressure and dyspnea. This request was acceded to and eight ounces of limpid serum was withdrawn, completely emptying the sac. A compress was applied, but the sac speedily refilled, as I had predicted. The patient was warned of the dangers of repeated aspiration, which might produce abscess. Treatment by injection was agreed upon. In about six weeks after the first aspiration, when the tumor was larger than before, it was tapped with a trochar, its contents wholly evacuated, and two drachms of Morton's fluid (iodine gr. x, iodide potash gr. xxx, glycerin oz. j) was injected. The parts were thoroughly manipulated to distribute the fluid to every part of the sac. A very firm compress was applied for two or three days. Considerable inflammatory induration took place and the cyst partially refilled, perhaps to the size of a goose egg, but at the end of six weeks scarcely a trace of the original tumor was left, and to-day its existence cannot be determined. The treatment was successful in this case and is in many, though it sometimes fails. More is to be expected in this treatment, in this variety,—the serous,—than in the other varieties. I believe it to be especially worthy of a trial in cases where the more radical treatment is refused. Though it has the disadvantage, when not successful, of making a subsequent removal more difficult and dangerous. It must be borne in mind that the removal of these deeply seated cysts or fistulæ is quite difficult, because of their intimate relation with important vessels, etc.

The works on general surgery give little or no space to this subject. Ashhurst's Supplement gives it some considerable attention. In Senn's classical work on tumors the subject is exhaustively treated.

Digitized by Google

THE SECOND PAN-AMERICAN MEDICAL CONGRESS.

BY H. B. LOWRY, M. A., M. D., PH. D.,

THE OFFICIAL DELEGATE FROM NEBRASKA TO THE CONFERENCE; PRESIDENT OF THE MISSOURI VALLEY MEDICAL SOCIETY; EX-PRESIDENT OF THE NEBRASKA STATE MEDICAL SOCIETY; PERMANENT CORRESPONDING SECRETARY AND LIBRARIAN OF THE STATE SOCIETY; PROFESSOR OF DISEASES OF THE NERVOUS SYSTEM IN THE OMAHA MEDICAL COLLEGE, ETC.

In compliance with a request from the REVIEW that I should "write up" the Second Pan-American Medical Congress which met in the City of Mexico on the sixteenth to the nineteenth inclusive of November last, I shall endeavor to give some account of that important meeting. It was doubtless the most representative body of the New World's medical men that ever assembled. In what I shall say I have chosen not to be conventional, that is, not to restrict my remarks to the scientific aspect of the meeting or to the proceedings proper, but shall also make some observations on the personnel of the congress as well as to note some of the social features of the gathering, though in this last, however heroic my endeavor, I feel that I shall be wholly inadequate to the task, for it is in this sort of thing that we of the United States feel that we are not equal to our neighbors south of the Rio Grande. Social evolution is a slow process and the ancestors of these people were highly cultivated and elaborately and tastefully dressed when ours were a barbarous people robed in the skins of wild beasts. The pure-blooded Spanish and especially the aristocrats are a chivalrous, courteous race that have in them the blood of a hundred dukes, and for centuries have inherited a love of adornment and of personal and public display which has not, to anything like the same degree, been developed by the more vigorous and rugged Teuton. Whether great refinement in manners, coupled with a love of display, is incompatible with mental vigor and moral soundness it would manifestly be out of place to discuss here, but in entertaining the congress these race or national characteristics of the Spanish-Americans were seen to the best advantage.

Although I made inquiry at the office of registration, I was unable to ascertain the exact number of physicians from Canada and the United States, but that they were quite numerous was everywhere in evidence. Many physicians were accompanied by their wives (I do not know that any were accompanied by their husbands), and many who were not doctors took advantage of the excursion, so that the town was full of Americans.

Mr. Reau Campbell had arranged a very nice excursion, called the "official train," but as delightful as was the company those of us who had looked into the history and the affairs of Mexico for ourselves did not care to limit our visit to the republic, to the Mexican Central railroad and its branches. Furthermore, as we knew what we wanted to see, we preferred not to be "personally conducted." The writer having read Grace King's book on "New Orleans: The Place and the People," went out of his way to spend two days in that most unique of American cities. At San Antonio he met Drs. Jonas and Slabaugh, who were contemplating the Alamo and pondering on the heroic deeds and sad fate of the lamented Col. Davy Crockett. Many other doctors were met here, the most prominent of whom were Dr. William Pepper, of Philadelphia, and Sir William Hinxton, of Montreal, Canada. The latter gentleman is tall and distinguished looking, with a typical English face adorned with the conventional English side whiskers. He has a prepossessing presence and is most courteous in his manner, being unusually cordial for an Englishman; for those who have seen much of the English realize that while they may be the best people in the world, they are not effusive. Sir William was one of the distinguished men of the congress, and of course the attention paid him was in proportion to his importance. I am informed that he is the only man of the Canadian profession who has had the distinguished honor of having been asked to read a paper before the British Medical Association. Although an elderly gentleman, he is well preserved. I was much pleased with his cordial expression of hope that many doctors from the states might be in Montreal next August when the British Medical Association meets with the Canada Medical Association. Those of my readers who may meet him next year in his own city I am sure will find him all and more than I have described him to be. Another distinguished Canadian was Dr. Lachapelle. He was also a prominent figure of the congress. Dr. Wright was still another most royal good fellow from the Dominion, but I saw less of these gentlemen than of their distinguished compatriot.

Of our own countrymen, Dr. Pepper was of course the most distinguished, distinguished not only as a physician but also as a scholar and a man of affairs. What can I say of him. You all know him. Stately in appearance and dignified in bearing, every feature betraying intellect and culture,—the prince of doctors and of gentlemen. He was the central figure of the congress. Having been its first president, he was elected its third. He evidently made a careful study of the country, and if one may judge from the trend of his interest his sympathies are altogether with republican Mexico. In passing through the country he observed closely the native and admired the neatness of his limb and the elasticity of his step. I was fortunate in the privilege of visiting the National Palace in company with the doctor and one of the most distinguished scholars of the republic, the minister of ancient monuments. While in the palace we of course visited the Hall of the Ambassadors, a kind of national portrait gallery. The portraits of Hidalgo, Morelos, Juarez, or Diaz elicited from

Digitized by Google

the doctor the warmest words of praise, but before a royalist's picture he would shrug his shoulders as much as to say this is another matter. However, the shrug may have simply been the result of his speaking French.

THE FIRST GENERAL SESSION.

The headquarters of the congress was in the School of Mines building, a magnificent structure that we all remember our geographies spoke of as being noteworthy. It was well adapted to the purposes of the congress so far as the meetings of the sections were concerned, but had no hall large enough for the general sessions. The first of these was held in the National Theater, a fine edifice with a handsome classic portico. It, like the French opera house in New Orleans, is constructed after the European fashion, with the stalls running clear round from footlight to footlight and being three stories high, with the gallery still higher. It has a seating capacity of three thousand and is the fashionable theater of the city. On Monday evening, the 16th of November, as we entered the building, there were files of soldiers extending from the street across the portico and along the passage-way. The famous Eighth Cavalry band, so well and favorably known in the United States since the Cotton exposition in New Orleans, was playing. The doctors, wearing red badges, which designated them official delegates and conferred certain privileges, were seated on the stage. The other members, wearing yellow badges, were shown seats in the parquet. The wives of the members and visitors, among them being many officers of the municipal and federal governments, occupied the boxes. Every seat and every bit of standing room was taken. The decorations were elaborate, appropriate, and tastefully arranged. Back of the stage was a cast of the great calendar stone of the Aztecs, while the sides of the stage showed architecture such as would delight the eye of the archæologist. There was a strong hint of the National Museum and a suggestion of the ancient glory of the aborigines. The boxes were draped with the flags of the different American republics and of Spain, England, and France. The electric lighting was handsome and brilliant. The floral display was the most lavish I have ever seen. When everything was in readiness the orchestra played the national air. Everybody stood up and President Diaz, accompanied by his minister of education and minister of foreign affairs, entered between the files of soldiers, Diaz taking his seat in the presiding officer's chair, with one of the ministers on either side. When the orchestra had ceased he made the following address, which I copy from the Mexican *Herald:*

"Gentlemen: In the name of the government and the people of this republic, I extend to you the most cordial welcome. The Mexican nation, and the people of this capital in particular, rejoice at your presence, for it signifies not only the brotherhood of all the nations on this continent, but the community of their efforts to promote a science which is of more interest to humanity than any other. The aim of that noble science is to preserve or restore the priceless blessing of health, and when it fails of attaining that aim to the fullest extent, it at least alleviates the ills that constitute the sad inheritance of humanity and is a timely auxiliary in warding off ailments.

"On this account, gentlemen, your coming to Mexico is for me and for all my countrymen a source of profound and sincere gratification, and on this account, too, the Mexican government takes pleasure in aiding you in your labors to the best of its ability.

"We are cordially grateful for your choice of this city as the scene of the sessions which have to-day been inaugurated. It is to be hoped that those sessions will strengthen the cordial understanding and growing intercourse among the physicians of the New World, to the immense advantage of the useful science to which you have devoted your lives. I hope, too, that your short stay in this country, besides being useful in promoting the cause of science, will also be agreeable to you personally and that you will carry away with you as pleasant a memory of Mexico as I am sure your visit will leave amongst us."

Taking his seat he resumed his duties as the presiding officer of the occasion. He wore full evening dress, as did everybody else. The president is about five feet and ten inches in height, erect, with broad shoulders, and has an iron-gray mustache and hair of the same color. He carries his sixty-five years so light that one feels sure that his country will enjoy the blessing of his rules for many years to come. He looks the great man that he is. Though wearing no crown he is more absolute than any king in Europe.

The secretary-general of the congress, Dr. Liceaga, read a report in which he took occasion to refer to Drs. Pepper and Reed, of the United States, in complimentary terms in connection with their work for the congress. He stated that the president and all his ministers had given their aid to the enterprise. The secretary's report stated that some sixteen or eighteen countries had responded to the invitation to send representatives. In closing, Dr. Liceaga bid us welcome in the name of the profession of Mexico.

The next gentleman introduced was Dr. Manuel Carmona y Valle, the president of the congress, who is also president of the National School of Medicine in the City of Mexico. He is an elderly gentleman, slender and tall, refined to the point of effeminacy, with remarkably small hands and feet, which, by the way, is noticeable in many of his class. His address was printed in English and consisted largely of an historical review. That blood is thicker than water is indicated by the following remarks. In referring to the relationship existing between Mexico and Spain the speaker said: "During the war of independence

Digitized by Google

we were loyal enemies; but in times of peace we are grateful sons." Again, apropos of the fact that within eight years after Cortez entered the City of Mexico as conqueror a college was founded: "What other conquering nation but the noble and chivalrous Spain would have thought of founding a college in such a newly conquered country?" In giving the history of the médical college he gave its present curriculum. The entrance examination covers a course requiring five years to complete, being quite analogous to our college course. The examination for the M. D. degree cover branches which require five years to complete. They are about the same as is included in our four years' course. An M. D. procured from the Medical College of Mexico represents five years of academic and five years of professional training. Besides this many go to Paris to complete their professional education. It is apparent that the Mexican doctor is not deficient in education. But in medicine, as in art and literature, and even in government, he is only a reflex. He is lacking in originality, but he does exceedingly well what others have done before him.

The president of the congress, in his address, referred to the chaotic state of things brought about by new discoveries,—a condition of affairs spoken of some months ago in the REVIEW'S editorial on typhoid fever. He thinks our nosology is so deranged as to demand a new classification. He likewise stated that in certain microbian diseases the germ itself is the direct cause of the mischief, while in others it appears not to be the microbe but its ptomains that causes the disturbance.

Dr. Carmona y Valle struck a sympathetic chord when he said: "I would point out an abuse that has gradually introduced itself, and with respect to which I would call the attention of the profession in general, and especially my colleagues who form the section of therapeutics. I refer, gentlemen, to the progressive and fabulous increase of the so-called patent medicines."

Señor Don José M. Gambra, an eminent lawyer in the City of Mexico and an officer of the federal district, was introduced. He is a lightly built, willowy man that bears the impress of culture on every lineament, and is eloquent beyond the average good speaker, indeed his was one of the most pleasing addresses of the evening. After a somewhat lengthy historical review of the growth and development of society on this continent he pointed out the desirability and urged the adoption of suitable international sanitary legislation, suggesting that the congress appoint committees to act at every national legislative seat in securing such legislation.

Dr. Pepper was introduced, and as he stepped out upon the rostrum he was met with a perfect ovation, the applause being general and prolonged. In personal refinement he was the equal of any of those who had preceded him, while in learning and in mental and bodily vigor he was greatly their superior. His address was masterly and delivered in the most effective manner. He defended medicine against the charge that it had not kept pace with surgery and showed that by the advances in bacteriology and the improved methods of prevention and cure of disease; in short, that in life saving, medicine is still far ahead of surgery.

After Dr. Pepper had finished President Diaz, in a few remarks, again welcomed the congress and spoke words of hope concerning its usefulness. With this closed the inaugural session. The national air was again played, everybody stood, and the "first magistrate" of the nation and his ministers passed out through the files of soldiers, the crowd slowly following.

It should be said that besides the national air, selections from Suppé, Nino, and others were rendered by the orchestra of forty musicians, from the conservatory of music, in the most artistic manner. Indeed, the congress, everywhere and on all occasions, was treated to very fine music. A military band never has less than thirty-five musicians, and often forty. Our army officers frankly acknowledge that so far as military bands go the Mexicans are far our superiors.

Among the distinguished men seated on the stage who were not on the program for the evening were Major General Wyman, of the United States army, and Dr. George W. Woods, director of the navy, both elderly but also soldierly looking, with all the courtesy of men bred to the army. With their professional record for learning and skill, the fine appearance they made in their full uniform, they did credit to their profession and to the army and navy.

Dr. Joaquin Yela, of Guatemala, would, by his dignified bearing, attract attention in any body of scientific men. There is about him that indefinable air of distinction that eludes description.

Dr. Juan Santos Fernandez, of Havana, Cuba, is rather undersized, but has that bearing of his race—formerly called kingcraft—that seems to hide, or at least minimize, the effect. At another meeting, when he appeared on the platform for an address, he was cheered so lustily that some Americans construed it as an expression of sympathy for Cuban loyalists. However, the applause was not more hearty than that which met Dr. Pepper's appearance on the rostrum.

Perhaps the most widely known visitor from the Spanish-American countries was Dr. Ortez, of Caracas, Venezuela. Apparently he is an agreeable man, as well as a man who has made his mark, for he was usually surrounded by a circle of admirers, with whom he seemed on the friendliest terms.

On Tuesday at 9 A. M. the work of the sections was well under way. Those that I visited were the sections on medicine, surgery, obstetrics, diseases of children, and eye and ear. These, of course, were not so well attended as the general sessions. A paper would be read and discussed

Digitized by Google

by those interested, who would pass out, and another paper would be read and discussed by another set of auditors.

On Monday we had been shown the museum of the medical school. On Tuesday from 11 A. M. to 1 P. M. we were shown the city slaughter-house, which is yet incomplete, but is altogether modern, both in its humanitarian and its sanitary arrangements. A most elaborate luncheon was served in the building. Sessions of sections were held from 3 P. M. to 5 P. M., and at the close a visit was made to offices of the supreme board of health.

A general session at 8 P. M. was held in the chamber of deputies, the hall of the lower house of congress, and a reception tendered the doctors' wives by Mrs. Camacho, which was a most brilliant affair.

On Wednesday and Thursday, besides the sessions of the sections, we were taken to see the hospitals in the morning and the penitentiary on Wednesday at 4 P. M. This prison is for the federal district and is yet incomplete, but one is impressed with its modernity. In point of comfort and sanitary arrangements and appliances it is altogether superior to anything I have ever seen. Among other desirable features it was a well-arranged school-room. As to the hospitals, they deserve more than a passing notice.

The general hospital is yet incomplete, but promises to be a well-arranged institution. At San Andres—well, Dr. Jonas said he would not operate there—but the American hospital is different. Here everything is modern—scrupulously clean, neat, and cosy. An excellent breakfast of American cooking was served here, much to the delight of certain fastidious stomachs that had not taken kindly to the Mexican. The chief benefactor of this hospital was a rich Spaniard, who happened to have been born in New York. It is maintained by the American colony. A charity ball given once a year, and attended by President Diaz, is one source of income.

The Concepcion Beistegui Hospital is the ex-convent of nuns (Regina). It will be remembered that prior to the organic laws of 1850 and 1859 the estates belonging to the church comprised about one-third of the soil, while their edifices were and still are the chief architectural features of the country. At the time above referred to the monasteries, together with all other superfluous ecclesiastical structures, were appropriated by the state. So the building was purchased and remodeled and fitted with modern appliances by the trustees of the late Miss Concepcion Béistegui y Garcia and was opened by President Diaz and blessed by the archbishop of Mexico just ten years ago. However, one of the fundamental laws of the institution states: "The object of the hospital is the attendance on sick people, without regard to their religious belief or nationality." Another law declares that "No sick person shall have any preference whatever, as they must all be assisted with the same care and regard." Again, "The religious opinions and beliefs of the inmates shall always be respected." The sick that die there are given a decent burial by the hospital at its expense, unless relatives or friends desire it otherwise. Like all Mexican buildings, for similar purposes, as the Jardin Hotel for instance, which also was once a convent, the hospital is ample and well constructed and has a large court that contains a magnificent garden with great trees, such as evergreen oaks, rubber trees, and the stately eucalyptus, together with innumerable roses and plants luxuriant with that wealth of foliage and bloom that one comes to expect in a subtropical flora. An ideal hospital. One over which even the fastidious Jonas grew enthusiastic and expressed unbounded admiration, alike for its cleanliness, its good equipments, its airy and well-lighted wards, its cheery comfortable rooms, and above all, for its garden of paradise.

THE MAYOR'S RECEPTION.

The reception given to the visiting physicians by the city council on Wednesday evening was considered by many the social event of the week. However, others made a similar claim for the Jockey Club's reception on Friday evening. The one given by the city officials was held in the municipal palace, which faces the Plaza de la Constitucion and is opposite to the cathedral, the greatest church edifice on this continent. The entire plaza, and the cathedral as well, were illuminated with electric lights displaying the national colors, the illumination befriending art in bringing out the magnificent lines of the majestic towers of the cathedral. The display of fireworks on the plaza was, I think, in every way equal to one of the big nights at the Atlanta exposition or at Chicago's world's fair. It was estimated that from ten to fifteen thousand people gathered in and around the square to witness the display.

As the guests arrived a military band was playing in the colonnade, and a row of soldiers (police) kept a space clear for carriages in front of the palace. Those wearing the badges of the congress passed, unchallenged, the double file of soldiers that guarded the colonnade and the entrance. Within the decorations were still more elaborate. To a northern man the profusion and the perfection of the cut flowers were a source alike of astonishment and delight. The orchestra was playing as we entered, and Mr. Camacho, mayor of the city, received the guests. He acted as host for the city council, by reason of his office. His young, accomplished, and charming wife acted as hostess. According to court etiquette the mayor's wife is the second lady of the land, but by general consent Mrs. Camacho is ranked as the first hostess. She speaks English, French, and Spanish, and is handsome and clever, accomplishments and qualities that are admirable in a hostess anywhere, but necessary in a cosmopolitan city like that of Mexico. There were perhaps a thousand guests present, and anything but

Digitized by Google

full evening dress was so rare as to attract attention. For the native women, the conventional thing seemed to be a Worth dress, diamonds, lovely shoulders, steady dark eyes, and a skin that in its texture is simply perfection. The ladies of Spanish extraction were not all from the City of Mexico, many Spanish-American cities being represented, so that the race characteristics could be well studied.

Going to the dining-room we passed through a grotto or artificial ice case, so natural that it made one shiver. The tables were in the great court of the building, which, by the aid of canvas, had been converted into a dining-room. In so large a crowd there was, as might have been expected, some confusion, and perhaps a deficiency in the service, but on the whole the thing was remarkably well managed. The tables were marvels of beauty, with that profusion of flowers and wealth of plate and French china that gives the impression of luxury combined with elegance. If there was less of the substantials than one would expect to see on a northern table, there was a greater abundance and variety of sweets and *dulcis*. Champagne, sherry, claret, and cognac were the only things that savored of the "abundance of vulgarity."

Thursday morning's sessions of the sections practically ended the scientific work of the congress. Owing to the importance of the occasion, the afternoon sessions were omitted, in order that all might attend the reception given the doctors by the supreme magistrate of the republic. There were many excellent, up-to-date papers presented, discussing questions of present interest to the profession, such as the following: "Connection Between the Temperature of the Patient and the Species of Bacteria in Appendicitis," by Dr. Moris, of New York; "Röntgen Rays in Thoracic Aneurism," by Dr. Pepper, of Philadelphia; "Tuberculosis in Mexico," by Dr. Francisco Blasquez, of the City of Mexico; "Typhus in Mexico," by Jesus Jiminez; "Biological Characteristics of the Blood in Yellow Fever," by Dr. Thomas Vincent Coronado, of Havana, Cuba; "Congenital Elephantiasis," by Dr. Moncorva, of Rio de Janeiro, Brazil; "Treatment of Burns in the Conjunctiva," by Dr. D. C. Bryant, of Omaha. General, military and naval, and railroad surgery were fully and well represented.

It is a great satisfaction to state that our own commonwealth was not lacking. There were no more substantial members of the congress than Drs. Jonas and Bryant, of Omaha. They, in every way, did credit to the American profession and to the state of Nebraska.

Dr. Jonas, who had not read a paper, expressed an opinion that the papers read in English were hardly up to our standard, for which he felt somewhat aggrieved. Bryant and I exchanged glances, but we didn't say nothin'. "Ah!" said a Spanish-American, who also had not read a paper, "but you should have heard those read in Spanish; then you would not feel so badly."

I have dismissed the papers of the congress with brief general remarks, because a résumé of them may be found in the general program and because such reports have appeared in other journals, and lastly, because the papers will be published in full in the transactions. If, on the other hand, I appear to give too much space to the people, their customs, and their institutions, it is because such an account has not, so far as I know, appeared elsewhere, and I am further inclined to this course because it was just these things that most interested the physicians in attendance. Those remaining at home, for whom I write, I have presumed to be of like tastes.

CHAPULTEPEC.

The reception by President and Mrs. Diaz in the palace at Chapultepec, on Thursday at 4 P. M., was the only function that was not a full dress affair, and, for this and perhaps other reasons, was the most generally attended. So large a crowd, of course, could not be taken in carriages, consequently most of the guests went in special cars of the district railroad. However, there were many carriages, among which were some magnificent turnouts. The carriage in which Nebraska's representative rode was drawn by four spanking bobtailed bays, with gold-mounted harness.

The two miles from the city along the Paseo de la Reforma, which is perfectly level and perfectly straight, is a drive equal in beauty to any in Europe or America. Here are the earliest as well as some of the best specimens of art to be found in the New World. Through the double row of majestic evergreen trees, at the end of the long perspective, the castle may be seen, crowning the eminence with a grandeur all its own, more conspicuous than any castle on the Rhine. When the structure was built is uncertain. It was remodeled in 1783, at a cost of $300,000. Many additions have since been made. The unfortunate but princely Maximilian spent large sums of money in fitting it for his residence. Some ten years ago still larger sums were expended in preparing it for the official home of the president of the republic.

As our carriage rolled briskly up the winding drive we were soon above the tops of the famous cypress trees under which Montezuma is said to have loved to linger. A little higher and we came upon a marble-paved terrace, surrounding an edifice with lofty halls and galleries, handsomely decorated—a palace in reality as well as in name. From here may be seen much that is historic, much that is picturesque, and much that is grand. Humboldt pronounced it one of the most magnificent views in the world. One is inclined to agree with the statement when he sees before him the delightful valley of Mexico, with its city and lakes, and beyond, the mountains. To the east the mighty, snow-capped volcanoes, whose names, unpronounceable as they are, have been familiar since childhood, hold the gaze with their awful grandeur.

Well to one side of the wide marble pavement

Digitized by Google

the famous Eighth Cavalry band, now become well known, was playing familiar American airs, while in the inner court, Vegas' orchestra of thirty pieces was interpreting classic music. The decorations were elaborate and tasteful, Mrs. Diaz herself having been occupied with them. They consisted of the flags of the different countries, most artistically draped, and of a profusion of flowers unknown to northern decorators.

In the grand parlor, on the first floor, the president received the guests in a quiet, dignified manner. He was assisted by Mrs. Diaz, a neat little lady with quiet manners, elegant, and altogether charming. Mrs. Camacho stood next to Mrs. Diaz. Miss Luz Diaz stood at the end of the line, a handsome girl, who, together with her betrothed, General Jeminez, in his full uniform, were much observed and elicited many remarks.

The luncheon was abundant and yet dainty, the table decorations being exquisite. The variety of sweets, that one would have thought to be exhausted on former occasions, appeared in many new and attractive forms, tempting the palate on every hand. Champagne, sherry, and rare clarets flowed free as water. Everybody admired not only the princely appointments and furnishings of the president's summer home, but also the open-handed hospitality with which we were received.

The crowd was cosmopolitan, and, on the whole, perhaps the largest body of important persons that ever assembled in this world-famous palace. Had every man been a prince royal, the inmates of this regal abode could have done no more to make them welcome.

THE DRAINAGE EXCURSION.

The closing general session was held in the chamber of deputies on Thursday evening, when the reports of the committees were heard and farewell addresses were made. The congress will hold its next session in the city of Caracas, Venezuela.

Those remaining on Friday were taken on a special train, by invitation of the board of directors, to see Mexico's great engineering feat, the drainage canal that is both to empty the lower lake and to insure a good sewerage system to the city. The canal likewise serves as a safeguard against inundation, the threatening of which has often frightened the people lest the disasters of 1629-34 should be repeated. During all of those five years the streets were only passable in boats. The dread of a recurrence of this kind has driven many to build their homes in Tacubaya. The cars on this, as on all similar occasions, were tastefully draped in the national colors and with flags of the different republics, the stars and stripes always being conspicuous. On such occasions hundreds of the common people would gather to see the excursion pass. The party, filling seven coaches, made the start at 7:30 A. M., and had breakfast served on the cars, then there was the usual sumptuous luncheon at Zumpango, followed by speeches.

Mr. William F. Pinkham, the celebrated civil engineer, of Boston, who had been in attendance upon the medical congress in order to prosecute his researches in sanitary science, upon which subject he is both an enthusiast and a recognized authority, was one who most profoundly admired the mighty monument of human skill and perseverance. Mr. Pinkham said that in his opinion the undertaking was one of the greatest he has ever seen, and that Mexico deserves more credit for that than for anything else, because she has done single-handed what it took all Europe to do in Egypt.

Dr. J. M. Colonek, the famous surgeon of the Hospital de San Juan de Dios, San Jose, Costa Rica, was also most enthusiastic in his praises. He thinks that when it is considered how France failed with the Panama canal, and how the United States is at a standstill in its work on the Nicaragua canal, the success of Mexico in this undertaking is most marvelous. The Housatonic tunnel is a gigantic piece of work, but it was done as a business proposition, whereas this canal has been constructed wholly without expectation of profit, save such as may indirectly arise from the benefit to the people by the improvement of their sanitary condition.

The tunnel, as has been said, is an outlet to the basin commonly called the valley of Mexico. It is more than six miles in length, and bored the entire distance through solid rock The work on the tunnel was conducted simultaneously in various shafts, the deepest of which is over 300 feet. The excavation of the canal was begun by an American company of Bucyrus, Ohio, about ten years ago, and completed within the last year by the world-famous contractors, Messrs. S. Pearson & Son, who are at present excavating the canal under the Hudson river at New York city, the breakwater at Vera Cruz, the harbor improvements at Coatzacoalcas, and are also the concessionaires for operating the Tehuantepec railway. The canal, exclusive of the tunnel, is over twenty-nine miles long, extending from the San Larazo gate to the entrance to the tunnel. When the sewerage system of the city, the contract for which will shortly be let, is completed, all the surplus water of the valley of Anhuac will flow through the canal and tunnel into the Tula river and thence to the Gulf of Mexico. This is the greatest of the sanitary undertakings of Mexico, but the spirit is everywhere manifest, especially in the construction of their buildings now in process of erection, both public and private.

The party returned to the city in the evening about 7 o'clock, feeling that they had spent a pleasant as well as a profitable day.

THE JOCKEY CLUB.

The last of the festivities of the congress was the reception given it by the "four hundred" of the City of Mexico, the Jockey Club. This club is housed in one of the prettiest and finest build-

Digitized by Google

ings in the republic. The exterior is faced with glazed tiles, the pattern being blue and white, with the blue predominating. It is not so striking in appearance as some of the tiled buildings in Puebla, but is in much better taste. The rooms are spacious and elegant, surrounding the customary court, and inviting to luxuriant ease. One of the famous military bands played in the court, while the orchestra was stationed in the main hall. The table decorations, the viands, and the service were in every way fully up to the high standard set by the city council and the president. Almost the only distinguishing features between this and the former receptions was the absence of a governmental or official host, and the presence in greater numbers of the city people. Many of the elegant persons seen on the previous Sunday in the promenade at the Alameda could be recognized in the throng, for the crowd was so dense that a throng is what it amounted to. It was noticeable, also, that a greater number of natives, and especially native ladies, spoke English than at any of the other receptions. This was probably due to the fact that there were fewer provincials and a larger number of metropolitan ladies present. They were uniformly courteous, free from any undue shyness, and entirely at their ease. In short, they bore every evidence of good breeding. As among English matrons, there is an apparent tendency for the elderly to become stout and, alas! also rubicund. Good-byes were said at a late hour, and so ended a series of functions more elaborate and more ceremonious than I had ever seen, in this country or in Europe.

The lavishness with which we were entertained during the entire congress might not, theoretically, meet the approval of Americans, but when one is the recipient of such bounties and attentions—well, that makes a difference.

Miscellaneous.

IT is well to recollect that the danger from chloroform is while it is being inhaled. The danger from ether is after the operation is over.

ACCORDING to Dr. Blenkiser, in the *Scalpel*, surgical instruments, sponges, the hands of the operator, and other blood-stained articles may be readily cleansed by washing them in a tepid solution of tartaric acid and then rinsing in water without soap.

A RAPID CURE FOR GONORRHEA.—Dr. Ferd. C. Valentine, in the *International Journal of Surgery*, condemns the so-called conservative do-nothing policy in the management of acute cases of clap, and strongly commends the large irrigations with hot potassium permanganate solutions heretofore practiced by such men as Felike, of Buda-Pesth, Janet, of Paris, Frank, of Berlin, and Brewer and Swinburne, of New York. The writer reports within the past two years less than two per cent of failures with this hydrostatic method, recovery usually taking place within two weeks. Irrigations should be begun as soon as the microscope shows gonococci. The formulæ of Janet for acute gonorrhea are as follows: First day, anterior irrigation, morning 1-1,000, evening 1-4,000. Second day, anterior irrigation, morning 1-3,000, evening 1-4,000. Third day, intravesical irrigation, morning 1-2,000, evening 1-4,000. Fourth day, afternoon, intravesical irrigation 1-2,000. Fifth day, morning and evening intravesical 1-2,000. Sixth and seventh days, same as fourth. Eighth and ninth days, same as fourth, except that strength of solution is increased 1-1,000. Tenth day, anterior irrigation 1-5,000, intravesical 1-5,000. These formulas must, of course, be modified according to circumstances. The solutions for chronic gonorrhea are much the same as for the acute, anterior and intravesical irrigations being made to alternate with each other. In the chronic form of the disease, stricture and other complications must necessarily be removed before a cure can be expected. A special though not costly irrigating apparatus is required for successful work, as ordinary catheters cover to some extent the foci of infection and thus prevent access of the germicidal fluid.

A NEW TEST FOR SUGAR IN THE URINE.—A new test for sugar in the urine, devised by Dr. A. R. Elliott, and claimed to be most accurate, is as follows:

Solution 1:

℞	Cupric sulphate . . .	gr. xxvii.
	Glycerine (pure) . .	ʒ iij.
	Distilled water . . .	ʒ ijss.
	Liq. potassæ . . .	℥ iv.

Dissolve the cupric sulphate in the glycerine and water and gently heat. When cold add the liquor potassæ.

Solution 2.—A saturated solution of chemically pure tartaric acid.

These solutions are quite stable and keep indefinitely.

Into a test tube pour a drachm of the cupric acid solution. Boil gently over a spirit lamp. Then add two or three drops of the tartaric acid solution and boil again. The urine is now added slowly, drop by drop, until eight drops are added. If no reaction takes place by this time there is no sugar. The reaction is a yellowish or reddish or greenish-gray deposit of suboxide, which is marked and unmistakable. In a few minutes the reaction deepens.—*Philadelphia Medical and Surgical Reporter.*

THE EARLY DIAGNOSIS OF LOCOMOTOR ATAXIA.—In an editorial article in the *American Medico-Surgical Bulletin* for September 12th the writer says that the diminution or loss of the knee-jerk of one or both limbs is the earliest and an almost unfailing sign of tabes. This defect, along with

Digitized by Google

the characteristic Argyll-Robertson pupil and one or more subjective symptoms, in the absence of indications of other diseases, is sufficient to establish a diagnosis. The most common initial subjective manifestation is the peculiar sharp "lightning" pains in the lower extremities. Next is observed retention or dribbling of urine. Ataxia may be present as an early symptom without being noticed by the patient. It may be tested for by having him stand on one foot, or walk with the eyes closed. Both the pains and the ataxia may be of late appearance, so that the case will not come under clinical observation until the disorder is well developed. In a small percentage of instances blindness, due to double primary optic atrophy, is the earliest symptom. In conjunction with suppression of knee-jerk it nearly always indicates tabes with certainty. The presence of anesthetic areas, chiefly on the trunk and legs, is of value in forming a diagnosis of locomotor ataxia. Other localized symptoms, as arthropathies and oculo-motor palsies, sometimes occur early in the course of the disease.

Chloroform in Labor.—The writer desires particularly to direct the attention of those commencing the practice of obstetrics, and those who have hitherto entertained adverse opinions, to the advantages to be obtained from the judicious use of chloroform, and its superiority in labor. Its indication is toward the close of the second stage. The extent to which the narcosis should be carried depends upon the condition of the patient, the influence on uterine contractions, and the necessary procedures for delivery. Though cardiac, renal, or pulmonary disease be present, these do not constitute valid objections, although additional caution must be observed in its administration.

From observation at the bedside and from study of the literature the author draws the following conclusions:

1. Chloroform is safer in the parturient than in any other condition.
2. Its safety is greatly enhanced by proper administration.
3. It diminishes shock.
4. It destroys future dread, and therefore robs childbirth of one of its principal objections.
5. It does not affect the fetus even in prolonged use.
6. Labor is not prolonged, and the puerperism is uninfluenced.
7. Uterine inertia is not more frequent.
8. Its use is invaluable in normal labor, and positively indicated in all operative procedures.—F. B. Earle, in *Chicago Clinical Review.*

Veratrum Viride in Puerperal Eclampsia.—Dr. C. D. Hurt says: Veratrum viride is a nervous sedative, a muscular relaxant, a glandular excitant. When taken into the system it lessens the susceptibility of the sensory nerves, and modifies the action of the spinal cord and vasomotor nerves. At the same time, if coma exists it has a property of removing it and restoring the mental functions. Other remedies for puerperal eclampsia have their places, and some of them are valuable; but no one meets all the indications as does veratrum viride. Taken internally, chloroform acts as a sedative narcotic, operating chiefly through the nervous system, independent of vascular action or congestion, or without any beneficial influence on the latter condition. Veratrum is a sedative, operating through the nervous system, relieving coma, and removing congestion, and eliminating certain effete matters by stimulating the secreting organs. Bromid of potash and chloral are too feeble, unreliable, and slow in their action. Morphin stupefies, lessens pain, but is objectionable in locking up the secretions. Apomorphia produces greater distress with fewer good effects. Venesection is admissible in all robust patients or cases of plethora, by removing a certain amount of effete matter from the system and encouraging easier and more rapid dilatation of the os. Indeed, with venesection and the judicious use of veratrum there is no condition of the os not dependent upon actual stenosis which will not yield to parturient pains and avoid the necessity of incising—a surgical dexterity into which some obstetricians are easily tempted. Veratrum is suited to the treatment of eclampsia, whether ante-partum or post-partum, unless chronic disease or excessive anemia be present.—*Atlanta Clinic.*

Necrology.

Dr. J. H. Wray, of Winterset, Iowa, died November 11th.

Dr. J. T. Wilson, of Galesburg, Illinois, died November 27th, aged 39.

Dr. D. Ellison, of Elizabeth, Colorado, died November 11th, aged 34.

Dr. V. H. Harrison died in Kennett, Missouri, November 24th, aged 60 years.

Dr. J. A. Scott, a graduate of Louisville Medical College, 1876, died at his home in Havelock, Nebraska, November 16th.

Sir Benjamin Ward Richardson, of London, died November 21, aged 67. He was one of the literary lights in medical literature, of broad culture, and of high attainments in all branches of medicine. He has held many offices of honor and trust and was knighted in 1893.

Dr. Andrew B. Barbee dropped dead in St. Louis, November 15th, while returning from a professional call. He was one of the oldest Masons in St. Louis, having belonged to that order over fifty years. He graduated from the Missouri Medical College in 1852, and had thus been in active practice over fifty-four years. He was about 77 years old.

Digitized by Google

Books and Pamphlets Received.

Adenoid Vegetations in the Vault of the Pharynx. By Seth Scott Bishop, B. S., M. D. Reprint from the New Albany *Medical Herald.*

Acute Suppurative Inflammation of the Middle Ear; Acute Suppurative Mastoiditis; Abscess of the Neck; Operation. By Seth Scott Bishop, M. D. Reprint from the *Laryngoscope.*

A Series of Articles on Speech-Defects as Localizing Symptoms, from a Study of Six Cases of Aphasia. By J. T. Eskridge, M. D. Reprint from the *Medical News*, June 6th to September 19th, 1896.

A Clinical Study of Twenty-One Thousand Cases of Diseases of the Ear, Nose, and Throat. By Seth Scott Bishop, B. S., M. D., LL. D. Reprint from the *Journal of the American Medical Association*, September 26, 1896.

The Christmas number of *The Horseman* is received and it proves to be even better than that of previous years. The illustrations are perfections of the combined art of the photographer and printer, and are really all works of art. The contents of this number will make glad the heart of all lovers of good horse flesh who have the chance to read this journal,—and what doctor is not a lover of a good horse?

Typhoid Fever and Its Abortive Treatment. By John Eliot Woodbridge, M. D. The Cleveland Medical Publishing Company, Cleveland, Ohio.

Dr. Woodbridge has in this book of 370 pages given us an exhaustive description of typhoid fever and its treatment by his method. While there is nothing new in the book outside of what has already been published in medical journals, the author has devoted considerable space to the history, geographical distribution, causes, prophylaxis, etc., of the disease, making altogether a valuable monograph on typhoid fever.

The greater part of the work is taken up with ten papers read before different medical societies during the last three years, the first three discussing the question, "Can typhoid fever be aborted?" One cannot read these three papers, and those that follow, without becoming impressed with the idea that the author is in earnest in his belief that his treatment absolutely aborts all cases. In the preface he says: "In no instance in which a case of typhoid fever has come under my care prior to the eighth day of illness have I failed to abort the disease in ten or twelve days or less—that in no instance in which I have been called so early that a reasonably positive diagnosis could not be made on the first or second visit, have I had a well-developed case of typhoid fever." In the introduction he says: "I believe that in every uncomplicated case of typhoid fever the disease can be aborted, if proper antiseptic treatment be instituted at a sufficiently early stage of the malady. I have never taught that the disease can always be aborted when the treatment has been too long deferred, but I have taught that uncomplicated typhoid fever should never cause a death,—an obvious deduction from the first declaration."

While the Woodbridge treatment, as advocated by the author in this book, has been faithfully tried by many, and while he has not a few enthusiastic followers, it is doubtful if any are willing, or ready, at least, to accept it with the faith of its author. That it is a good method of treatment, as far as medicine is concerned, and probably the best, in the hands of very few has it proved equal to the Brand method. But we must acknowledge that while the Brand method is undoubtedly good, it is impracticable in too many cases. Every patient cannot be sent to a hospital, and the expense of the treatment in the ordinary home precludes its use except in the families of the well-to-do. Dr. W. Gilman Thompson has computed that the cost of a Brand bath in private families is two dollars and a half, and that many cases require at least a hundred baths. Probably two dollars and a half is a rather high estimate, but whether this is so or not, the fact is that the expense attached to the Brand treatment, if rightly done, precludes its use in a majority of cases, outside of hospitals.

Dr. Woodbridge's book will be a disappointment to many, in that the most of it, as mentioned above, is taken up with papers already published, and that without change, making too much repetition. It would have been better had the author rewritten these papers and eliminated those parts that are merely repetitions of what occurs in preceding pages. The book, however, is a credit to the author, and will well repay reading by the general practitioner, who is continually called upon to treat typhoid fever.

Over the Hookah: The Tales of a Talkative Doctor. By G. Frank Lydston, M. D. Chicago: Fred Klein & Co., 32 Market street.

Dr. Lydston, in this book of over 600 pages, has surprised his most ardent admirers. It is unique. It is beautiful. It is amusing. It is a literary gem, and not a very small gem at that. It is hard to tell which to admire most—the artistic illustrations or the book from a literary point of view.

There is no other book with which to compare Over the Hookah, but were it otherwise the comparison would show that Dr. Lydston would not have to blush at the result. There is a vein of humor running through the whole work that reminds one of Bob Burdette, and yet it is only in that one thing that comparison could be made. It is a combination of character sketches, dialect stories, pathos, and humor. The "Hookah" is the Arabic pipe, and it is while enjoying this that "Dr. Weymouth" gets off his sarcastic thrusts at the medical profession, his stories that are used to hit off the foibles of men, medical and otherwise. And while a very few of

Digitized by Google

these stories may not be new, there is nothing of the chestnut about any of them. To those who personally know the author it is not necessary to say that he never tells a poor story, and of course he could not write one. But these published stories are not all of the "short order" variety, some being quite lengthy. Especially is this so of "The Passing of Major Merriwether," one of the best, if the longest, stories of the book. It is a story of a California mining camp of early days, full of fire, fire water, and vim, as is frontier life, with a peculiar character as the hero, who is a coward and brave, full of "honah," yet a knave, proud, but poverty-stricken, a model of simplicity, but withal an egotist. The story is well written, with a "catchy" style that prevents the weariness that afflicts one so often in reading many dialect stories. But why the author stops between chapters, and in the middle of the story, to talk about other matters it is hard to see. Between the first and second chapters of the story he has "Dr. Weymouth" give his opinions of the doctor in literature, an agreeable and pleasant theme at all times, to be sure, but would it not come in just as well when the story was finished? This is what "Dr. Weymouth" says about one doctor in literature:

"It is probable that no more beautiful character sketch has ever been written than that of Dr. William McClure, by Ian MacLaren. In reading this story one cannot help feeling that the self-sacrificing country practitioner has had justice done him —for once.

"Sancho Panza remarked that men were 'as God made them, and sometimes a good deal worse.' Doctors are as God made them—or as nature designed them, if you please—and usually a great deal better."

But we are shown how the doctor has been maligned in literature by Dryden, Ben Jonson, Dean Swift, Hogarth, Tobias, Smollett, and others, and then "Dr. Weymouth" says:

"But literature has, after all, done our noble profession much honor. One touch of realism, in certain places, sweeps away the rubbish of a century of criticism, like so much chaff. Wherever the milk of human kindness flows most abundantly across the fair fields of literature, there will you find the doctor. Whether he be of the gig, or saddle-bags and cross-roads, or rides in a stylish brougham about the city streets, the doctor is always identified with the hopes, and joys, and fears of the human heart. He it is who shares the joys and sorrows of the little children, those divining angels whose keen perception sees the doctor as he is, beneath his austere demeanor and professional dignity. Do they ever doubt him when he tells them how he bought that sweet little baby brother from a man down the road and brought him straight to them, because they are his pets?

"Never! And when the dear little pink blossom is blighted by some affliction that even his wisdom cannot avert, the good, kind old doctor is their only consolation. He alone knows where the fairies keep babies for sale, and only he can promise to bring them another, some day, to replace the one he brought and took away—the one they loved and lost.

"Where is there a grander character in literature than the doctor?

"He is a 'skeptic,' they say. Some critic has gone farther and said, 'Scratch a doctor's back and you will find an infidel.' Occasionally, perhaps, but you will usually find a man."

There are nearly 150 illustrations,—half-tone and zinc etchings from pen and ink drawings, etc., —some full-page, some smaller, but all good. They are remarkable for freshness, and, so far as practical, portray the actual scenes in life. Apart from their striking and artistic beauty, the engravings are not overdrawn, which adds greatly to their value and beauty. If the author attempted to make a beautiful work of art, he has succeeded admirably; if he attempted to make a book of literary merit, that should be entertaining, amusing, instructive, and *fin de siecle*, he has certainly accomplished his purpose. Over the Hookah is a good book to pick up and read to drive away the blues, for every page is interesting, and nearly every page is amusing. From a literary standpoint it will compare favorably with the best works of our best authors. Wit and satire commingle in such a way that at times it is hard to tell where one begins and the other ends. It is a book for spare moments, but which can be read for hours without weariness.

Dr. Lydston has been known for some time as a good writer on medico-scientific subjects, but he has now established a reputation as being worthy to belong to that bright galaxy of men known as "literary doctors." We doubt not but he will be heard from again, probably as a novelist, but it will be hard for him to give us another work combining greater merit, from a literary and artistic standpoint, than Over the Hookah. We are afraid, however, that its great merit will be marred, to a certain extent, at least, for non-medical readers, as much of the wit and sarcasm and too many of the "points to the story" will be lost upon the ordinary lay reader.

We call the attention of our readers to the advertisement elsewhere of Kutnow Bros., and would advise them to send for samples of their products. We have used their Antiasthmatic Cigarettes, and find they give instant relief in that distressing malady. Their Effervescent Powder is a most pleasant and agreeable aperient, having for its basis Carlsbad salt, but its wretched taste is eliminated.

Dr. W. A. Walker, of New York, in an article on "The Modern Treatment of Diphtheria," in *Pediatrics* for October, says: "The importance of a fresh, reliable, highly concentrated serum must not be lost sight of, and as I have full confidence in our American products I do not use imported serums. I have used several serums, but have been best satisfied with the effects of that sent out from the biological department of Parke, Davis & Co. I heartily approve of the way this firm now puts up the serum, in bulbs instead of in bottles. It is not only highly concentrated, but, being hermetically sealed, should keep indefinitely. It is put up in bulbs of so many units, 250, 500, 1000, 1500; and, each bulb being a dose, there is no temptation to use a serum that has been exposed to the atmosphere."

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. I. No. 3. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. JULY 15, 1896.

CONTENTS.

ORIGINAL ARTICLES. PAGE

Injections of Carbolic Acid in the Treatment of Hydrocele, Ganglia of the Wrist, Housemaid's Knee, and Tuberculous Cervical Glands, by Victor H. Coffman, Omaha 53
Notes of a Case of Suspended Volition and Locomotion, by G. A. Meredith, M. D., Crawford 55
Syme's Operation as a Prothetical Expedient, by P. H. Salter, M. D., Norfolk 56
Report of Surgical Cases, by John Prentiss Lord, M. D., Omaha, 57
My Latest Improved Binaural Stethoscope, by Charles Denison, A. M., M. D., Denver, Colo 59
An Unfortunate but Instructive Case of Middle Ear Disease, by H. Gifford, M. D., Omaha 61
The Treatment of Appendicitis, by H. J. Winnett, Lincoln 62

EDITORIAL.

Antitoxin Treatment of Diphtheria 65
Medical Journal and the "Reading Notice" 65
How is This? 66
The Bracelin "Remedy" 66
Reciprocity Among Examining Boards 67
About Ourselves 67

NOTES AND NEWS 68–70
New Medical Law in Ohio 69

CORRESPONDENCE.

Gastric Ulcer, by Dr. F. P. Dorsey, Hartington 70

SOCIETY PROCEEDINGS. PAGE

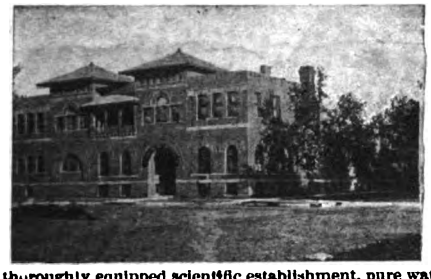
Nebraska State Medical Society 71
Second Pan-American Medical Congress 71
Other societies 72, 73

STATE BOARD OF HEALTH PROCEEDINGS.

Proceedings of the Nebraska State Board of Health 73

MISCELLANEOUS.

Summary of the Antitoxin Report of the American Pediatric Society 73
The Rational Treatment of Abortion 74
The Value of the Pulmonic Sound, by J. N. Hall, M. D., Denver, Colo 75
Appendicitis 76
The Cause of Death in Serum Injections 76
Liability to Prosecution for Damages in Abdominal Surgery 77
Serum Treatment of Malignant Tumors 77
Another Substitute for Murphy's Button 77
Chloroform to Prevent Perineal Lacerations 78
Summary of Serum Therapy 78
Medical Nomenclature 78
A Practical Test for Albumin 79
The Death of Dr. Langerhaus' Son Explained 79
A New Hypnotic 79
NECROLOGY 79
THERAPEUTIC NOTES 80
BOOKS AND PAMPHLETS RECEIVED 80



LINCOLN
Sanitarium
AND
SALT BATHS
LINCOLN, NEB.

A thoroughly equipped scientific establishment, pure water, perfect sanitary system. Six physicians, well trained and of large experience. Trained nurses and skillful attendants. All forms of baths—Turkish, Russian, Roman, Electric—with special attention to the application of

NATURAL SALT WATER BATHS.

several times stronger than sea water, for the cure of Rheumatism and nervous difficulties and many other chronic diseases, Stomach, Kidney, and Liver troubles, etc.

A special department for surgical cases and diseases peculiar to women. Prices reasonable. SEA BATHING may be enjoyed at all seasons in our large Salt Swimming Pool, 50 x 140 feet long, and 4 to 10 feet deep, heated to a uniform temperature of 80 degrees.

DRS. M. H. & J. O. EVERETT, Managing Physicians.

THE
BISHOP CLARKSON MEMORIAL HOSPITAL
1716 Dodge Street, OMAHA, NEB.

This old established Surgical Hospital has excellent accommodations for pay patients of either sex, both in private rooms and wards. Endowments allow of a limited number of suitable cases of the Surgical Diseases of Women and Children being admitted free of charge; also there are two free beds for the treatment of Cancer in Women. The hospital has every modern equipment for successful work and has also a Training School for Nurses connected with it. No cases of Pulmonary Tuberculosis or other Contagious Diseases admitted. The sick poor receive free examinations and treatment daily.

For further information apply at the hospital, or to

DR. J. E. SUMMERS, JR., Surgeon-in-Charge,
212 South 15th Street, OMAHA.

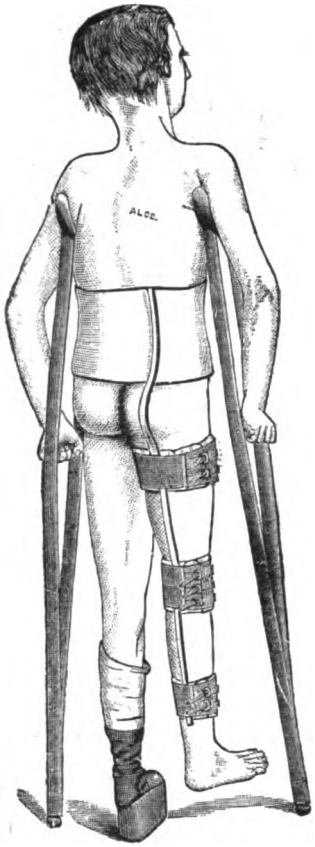
We are determined

to get a large subscription list, and to do so we do two things: give a good journal full of good reading matter, and also give it at a low price. Until the first of January, 1897, we offer you the REVIEW for ONE DOLLAR per year,—one-half price,—and you can pay for it any time between now and January 1. Send your order on a postal card.

P. S.—Send the dollar with subscription if you like.

Western Medical Review,
LINCOLN, NEBRASKA.

Digitized by Google

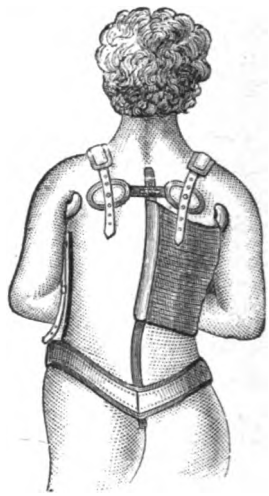


DOCTOR:

We would like to have your orders for

DEFORMITY BRACES.

We have our own factory and make all kinds of Appliances and **Repair** Surgical Instruments in the best workmanlike manner. Your orders for



Drugs,

Trusses, Supporters,

Elastic Stockings,

Surgical Instruments

will have our prompt attention.

THE ALOE AND PENFOLD CO.

OMAHA, NEBRASKA.

SANACEA

FOR URETHRAL AND REPRODUCTIVE ORGANS.

TO THE MEDICAL PROFESSION:

By an exhaustive series of experiments with Echinacea we have found it contains a peculiar principle that does not seem to exist in any of the so-called fluid extracts or tinctures on the market at the present time, and in the special combination we offer of pure Santal and Echinacea, using the word "SANACEA" to designate the same, we have a pleasant and powerful Internal Antiseptic, especially indicated in all forms of **Gonorrhea, Gleet, Leucorrhea, Prostatic Troubles, Ovarian Pains, and Urethral Inflammation,** and from results reported to us from many of the leading Practitioners, we have been induced to offer "SANACEA" to the profession, with the assurance that its virtues will justify its use in practice, as superior to anything now being prescribed.

SCHUYLER, NEB., March 31, 1896.

THE SANACEA CO.:

In regard to Sanacea, I have used it in a case of Gleet, and I never had anything to act so promptly in checking the discharge. I shall use it in all cases of Gonorrhea and Gleet that comes to me.

DR. I. S. STEVENS.

HARBINE, NEB., April 10, 1896.

THE SANACEA CO., Omaha, Neb.:

Have used your "Sanacea" in an extended case of Erysipelas with beneficial results, and consider the remedy worthy of your claims.

E. E. REYNOLDS, M. D.

CHAPMAN, NEB, March 16, 1896.

THE SANACEA CO.:

I have been using your preparation "Sanacea" in a case of Gonorrheal Rheumatism with Gleet, of two years' standing, with much better results than has attended the administration of any other remedies. Patient is making a RAPID and SURE cure, and am satisfied that it is an excellent internal antiseptic, valuable in many diseases.

J. E. MORRILL.

WHITEHALL, MONT., March 21, 1896.

THE SANACEA CO.:

Dear Sirs:—Please send me four dozen of your "Sanacea." I have used that you sent me and find it gives good satisfaction.

Sincerely yours, J. W. DAVIS, M. D.

THE SANACEA CO.

Put up in 8 oz. bottles, $8.00 per doz.
Single bottles, 75c each.

OMAHA, NEBRASKA.

THE ALOE & PENFOLD CO., WHOLESALE AGENTS.

☞ **Sample Bottle sent to any Physician who will pay Express Charges.**

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. I. No. 8. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. DECEMBER 15, 1896.

CONTENTS.

ORIGINAL ARTICLES. PAGE

Temperaments, by A. R. Mitchell, M. D., Lincoln 201
Surgical Notes, by J. E. Summers, Jr., M. D., Omaha 204
Note on the Relation of Reflex Genital Irritation to Glycosuria, by G. Frank Lydston, M. D., Chicago, Ill 206
A Case of Congenital Malformation of the Rectum, by J. P. Lord, M. D., Omaha 207
Guaiacol and Its Uses, by Allen F. Miller, M. D., Randolph 208
Ovarian Tumors, by Franklin H. Martin, M. D., Chicago, Ill 209
Abscess of the Nasal Septum, by F. S. Owen, M. D., Omaha 213
Acute Nasal Catarrh; Frost-Bite of the Auricle; Furunculosis; Diffuse Inflammation of the External Auditory Canal, by Seth Scott Bishop, M. D., LL. D., Chicago, Ill 215
Two New Needle-Holders, by Geo. Haslam, M. D., M. R. C. S., Fremont 218
Uricacidemia, by Inez C. Philbrick, A. M., M. D., Lincoln 218

EDITORIAL.

About Ourselves 223
Second Pan-American Medical Congress 223
The Harvey Medical College 224
Medical Advertising 225
NOTES AND NEWS 227

CORRESPONDENCE. PAGE

The Controversy Over the Harvey Medical College of Chicago 228
A Correction as to Dr. Kelly 229

SOCIETY PROCEEDINGS.

Lincoln Medical Society 229
Western Ophthalmological, Otological, Laryngological, and Rhinological Association 229
Western Surgical and Gynecological Association 229
Omaha Medical Society 230
Second Pan-American Medical Congress 231

MISCELLANEOUS.

The Weaning of Infants 203
Palatable Senna for Children 206
Vaselin in Erysipelas 212
Alimentary Tuberculosis 222
A Hard Case 222
Tight Bands 226
A Rapid Cure for Gonorrhea 237
A New Test for Sugar in the Urine 237
The Early Diagnosis of Locomotor Ataxia 237
Chloroform in Labor 238
Veratrum Viride in Puerperal Eclampsia 238
NECROLOGY 238
BOOKS AND PAMPHLETS RECEIVED 239

A NEW DIGESTIVE FERMENT.

Useful in all ailments arising from faulty digestion of starch.

The profession have tried, says the THERAPEUTIC GAZETTE, to aid the digestion of starch for many years by the use of various preparations of malt, which have been largely given with little direct good as a result, for the diastatic properties of most of these preparations are so slight as to render them practically of no value as digestants, whatever may be their usefulness when acting as nutritives. Within the past few months a Japanese investigator has obtained such a valuable diastatic product that his researches deserve careful study, and his results thorough trial. If, as he has apparently proved, we possess in Taka-Diastase a starch-digestant equal to or exceeding in power pepsin or pancreatin for proteids, we have made an extraordinary gain in therapeutics, for we are now able to relieve a large number of persons suffering from faulty digestion of starch, and can aid our patients during convalescence, so that they speedily regain their weight and strength by the ingestion of large quantities of the heretofore indigestible, but nevertheless very necessary, starchy foods.

Taka-Diastase has now been under trial at the hands of the profession for nearly eighteen months, and it seems to have been proven conclusively that it is the remedy in amylaceous dyspepsia. Immediate improvement in digestion follows its administration. From 1 to 5 grains should be taken with the food, or immediately thereafter; if in capsule form, at the beginning of the meal.

CORRESPONDENCE RESPECTFULLY SOLICITED.

PARKE, DAVIS & CO., Detroit, New York, Kansas City, Baltimore, New Orleans, U. S. A. London, Eng., and Walkerville, Ont.

Digitized by Google

TREATMENT OF HYDROTHORAX AND EMPYEMA.

By J. M. EMMERT, M. D.,
ATLANTIC, IA.,
PRESIDENT IOWA STATE BOARD OF MEDICAL EXAMINERS.

The treatment of these two conditions are quite different; that of hydrothorax being almost entirely confined to medicine, while that of empyema is almost entirely confined to surgery. Whether dropsy of the pleura is primary or secondary, as long as the fluid does not become infected, either from without, as in the introduction of an instrument, or from within by some pathological condition of the system, such as heart disease, pneumonia, or tuberculosis, it is amenable to treatment with medicines. Every effort should be made to remove the cause. The person should be given the most nutritious diet, with tonics and stimulants if necessary. The utmost care should be given to his surroundings, plenty of fresh air and sunshine with cleanliness should be insisted upon. If the fluid in the pleural sack becomes so extensive that it interferes with the heart action or with his breathing, thoracentisis may become necessary. When this operation is performed the strictest asepis must be adopted, otherwise you are sure to infect the cavity and then you have converted a simple pleuritic dropsy into an empyema.

I have tapped several pleural cavities for dropsy that have recovered without opening the chest; but I have also tapped some that have afterwards become purulent and had to be drained. I have about come to the conclusion that when it becomes necessary to relieve the pleural cavity by removing the fluid, it is about as safe to open the chest and drain as it is to withdraw the fluid by aspiration. In the great majority of cases there is but little pathological change in the pleura, and as soon as the fluid is withdrawn the collapsed lung again becomes expanded and the cavity is at once almost obliterated by the walls of the pleura falling together. If your operation has been clean and the cavity has not been infected, the discharge will soon cease and your patient gets well much sooner than if several tappings are necessary.

When the diagnosis of empyema is once established we have quite a different disease to treat. Medicines will not be of any avail, and we will only be wasting time and endangering the life of our patient by delaying or withholding surgical interference. It is our duty to get rid of the purulent matter and stop the supurative process at the earliest possible moment. The question at once arises, what operation shall be made? Shall we perform thoracentesis or open the chest and secure free drainage? Many authors, among them Smith and Jacobi, recommend the former, especially in children, and they give a number of cases where one to ten tappings succeeded in producing a cure. I never saw but one case where purulent pleurisy was cured in this way; that was in a girl of fourteen years, who had had pneumonia, complicated with pleurisy. One tapping cured her, to my surprise. In this case the infecting germ was the pneumococci of Frankil, or, as Americans, I think we ought to say the pneumococci of Sternburg, as I believe he was the discoverer of the germ. The pneumococci is the least virulent and destructive of the pathogenic germs invading the pleura, and undoubtedly those cases recovering after thoracentesis were of this type. It has been shown by careful investigation that even in this mild type a very small per cent. recover without a more radical operation, and that those cases where the streptococci, or saprogenic organisms, are the infecting cause, none ever recover without an operation.

It seems to me this kind of showing suggests but one operation, that of free drainage. Where shall we make the opening and what kind shall it be are the next questions to be answered. Any point from the sixth to eighth rib in the axillary line can be selected. Gode says: "The opening should be as high as the center of the effusion, which usually corresponds to the center of the sixth rib on the right side and the seventh rib on the left side." He selected a point half way between the nipple and the axillary line. Walther recommends the tenth rib posteriorly, about a hand's breadth from the spine. Geurin first taught that the pleural cavity does not empty itself like a barrel following the laws of gravitation, but obeying the expansive force of the lung and the crowding of the diaphragm, it causes the liquid to escape in the direction of the least resistance, and therefore towards any opening wherever situated. Senn always selects a point over the fifth rib in chronic pleurisy, so that the diaphragm ascending does not close the end of the tube and prevent drainage. I have always selected a point in the axillary line between the fifth and seventh ribs.

What kind of an opening shall we make in our operation? This depends upon the kind of cases we have to deal with. In children a simple incision is usually all that is necessary. In adults, where the case is recent, an incision between the ribs is sufficient. In old chronic cases the lung is bound down by adhesions, or where there is degeneration of the pleura, resection of the rib becomes necessary, or in cases where there is a deformity or where the ribs are unusually close together, producing narrowing of the interspace, resection is demanded. In several cases I made counter openings, but am of the opinion there is no particular advantage to be gained by this procedure. After the pleural cavity has been emptied, the question arises, should the cavity be irrigated or washed out. Some years ago it was the invariable rule to irrigate with some antiseptic solution. Raymond, in 1875, was first to call attention to the change in this practice, since which time it has gradually fallen into disuse, until to-day not one

Digitized by Google

case in twenty is irrigated. Bowditch says he found it necessary to wash the cavity only once in 399 operations.[1] The danger in washing out the pleural cavity is no fancy sketch, as those who have had much experience unfortunately know.

I have had several accidents, which were serious at least for a time. In one case, a boy of twelve years, I was washing with a solution of sulphate of iron, when he commenced strangling and finally became unconscious, remaining so for fifteen minutes. In another case, a young man of twenty-two, I was irrigating with a solution of bichloride of 1-10,000, when he swooned away; his heart became weak and it was some minutes before he rallied. This case was also salivated a few days after beginning the irrigation. In all cases where there is no fetor, irrigation is not only superfluous, but the patient is unneccesarily subjected to great danger. When there is bronchial fistula, irrigation should never be attempted; nevertheless, in cases where the pus is fetid, showing the presence of saprogenic bacteria, it sometimes becomes necessary to wash out with some antiseptic solution; even in these cases they often do as well if the drainage is free and thorough.

Free and continuous drainage is the most important factor in the treatment of empyema. To accomplish this numerous devices have been adopted. Each case will suggest the kind of tube to be used. If the case is recent and there is a normal expansion of the lung, a short elastic tube should be used, otherwise the lung, by friction upon the tube, may be injured. If the case is of long standing, where there is degeneration of the pleura, especially calcareous degeneration, or where the lung is bound down by adhesions, or diseased so that expansion cannot take place, a larger tube can be used; but the tube should never extend so low down into the cavity that it is closed by the rise of the diaphragm. All dressings should be aseptic as far as possible and extensive enough to take care of the discharge without being saturated through to the external surface.

I do not believe it is necessary to open the chest or dress under the spray, as many authors advise. In old chronic cases, especially where there is a fistula, the cavity should be exposed as far as possible and all shreds and sloughing tissue, exuberant granulations and calcareous deposits upon the pleura should be cleaned off by the curette. We usually find these conditions in cases where the lung is bound down by adhesions and the resisting chest wall is not able to sink in enough so that the two sides of the pleura can come in opposition. Where this is the case a more radical operation becomes necessary. Several operations have been performed to allow the chest walls to drop in, hoping thereby to bring about adhesions of the opposite walls of the pleura and in this way obliterate the pleural cavity. The operation that has been the most successful is that of Estlander, which you are well acquainted with and needs no description. Schede and Hamburg go so far as to remove all the soft parts, including the parie pleura and ribs, covering the viscera only with t skin.

In the tuberculosis of the pleura the best resu have been secured by drawing off the contents the cavity and then injecting a ten per cent. io form emulsion. Senn strictly adheres to t treatment in all cases where the tubercula ba lus is found in the fluid drawn from the cavi More or less medication is demanded in all ca and should never be neglected.

THE BEGINNINGS OF DISEASE.*

BY A. B. SOMERS, M. D.,
OMAHA, NEB.

In our enthusiastic endeavors to trace dise to specific causes, and, if possible, analyze t cause to the extent of discovering a specific ge it is more than probable that we are losing si of the most potent of all agencies in the prod tion of diseases, namely, derangement of functi

We have waged war on bacteria with an ent siasm that is worthy of a noble cause, and whil would not for a moment relax any energy in t direction, it is well to remember that the cause disease is multiple and not single, and that in der to make our victory more complete there work to be done all along the line.

It is characteristic of the profession, when gets hold of a new idea, that it is worked for it is worth, and sometimes to such an extreme t harm is done and disrepute brought upon me ures that are invaluable if kept within pro bounds. Numerous instances of this kind w suggest themselves without being enumerated this time.

We have been forced to the conclusion that d ease germs are much more prevalent in t economy of nature than we had formerly s posed, and the amount of sickness there is a given time depends on whether other conditi are favorable or unfavorable for the existence a multiplication of these germs. To illustrate: blow on the head of the tibia, a sprain of the k joint, or blood stasis in a lung as a result o cold, may precipitate a tubercular process at a one of these points, in a person that would oth wise be absolutely free from any tubercular sion. A change of atmospheric conditions prod ing local inflammatory changes in the upper passages increases the amount of diphther both by multiplication from given cases, and t springing up of so-called sporadic cases in loc ties remote from each other. Derangement of gestion, with defective elimination of the produ of degeneration, plus the typhoid germ, may p duce typhoid fever, when a healthy alimenta canal would have been destructive to the ge and no disease ensue. Habitual overeating, es cially of rich nitrogenous foods, the use of alco lack of exercise, and defective respiration tend

* Read before the Omaha Medical Society, December 8, 1896.

Digitized by Google

load the blood with effete products, and as a result of this condition a person is most favorably placed for an attack by a specific poison, or for a continuation of derangement of function which ultimately becomes a diseased process with destructive changes taking place in important organs. To this latter cause may be attributed many cases of chronic Bright's disease, organic diseases of the liver and spleen.

The bacteriologist understands the importance of using right culture media for the cultivation of pathogenic germs, and also the difficulties in the way, if all the conditions are not favorable. A condition of health, with normal activity of all the functions in a person, is unfavorable for the growth and multiplication of all forms of disease germs, and if, in addition to this condition of the individual, the environment or surroundings are sanitary, it would be difficult, except under great exposure, to contract the ordinary contagious diseases. But given the opposite condition of the individual or surroundings, and a person becomes an easy victim.

The pneumococcus is present in quite a large percentage of persons in perfect health, only a small proportion of which ever have had or will have pneumonia, owing to the conditions being unfavorable for sufficient development of the germs to produce the disease, but set some debilitating cause at work, or produce some local irritations of the respiratory passages, thus producing a fertile soil plus the pneumococcus, and pneumonia is the result.

One of England's greatest surgeons, Jonathan Hutchinson, has written on what he is pleased to call "The Precancerous Stage of Cancer." He recognizes an early period in the history of every case of cancer when the disease is purely local and the system is in no way implicated. He claims that the disease may be wholly removed at this time, and a permanent cure will result. At a later period the system becomes involved, the removal of the local disease is of no avail, the cancer recurs at the same or some other place, and a cure is out of the question. Admitting the truth of this reasoning as being in harmony with the general experience of physicians, it would also appear that what is true of cancer is true of all diseased conditions to a greater or less extent. In other words, it would appear that there is a condition of individual organs, or of the system as a whole, existing previous to the onset of disease, which condition renders the individual more susceptible to morbid influences, and in many instances is a direct predisposing cause of disease.

There is also a period of varying degrees of duration in the history of disease that it is only by the most painstaking examination that we are able to determine the true condition of things. There are numerous cases of functional derangement from a great diversity of causes, mostly of short duration, that are easily rectified, and usually are rectified, with little or no medical attention. There is also functional derangement with the onset of organic lesions, many times so remotely removed from the real organ involved that close scrutiny, careful observation, and keen perception are required to distinguish between a purely functional derangement and the functional derangement that always accompanies organic change. True, functional derangement continued, results in organic change and the one becomes a grade or stage of the other; how important, then, it is that these conditions of the system and tendencies to disease be promptly recognized, proper hygienic, medicinal, or surgical treatment instituted, and serious if not fatal results averted.

The expectant plan of treating disease may at times be a necessity for a limited length of time, owing to the fact that certain diseases so closely simulate each other at the onset that their individuality can hardly be recognized, but let us freely admit that expectant therapeutics and symptomatic treatment is an admission of ignorance on our part that may prove culpable. Symptoms are of sufficient importance sometimes to demand immediate and energetic attention. Pain, for example, must be relieved regardless of cause, high temperature must be reduced, even though we are unable to remove the conditions producing the temperature, but let us forever rid ourselves of the idea, as we would of heresy, that the treatment of symptoms is an intelligent method of treating disease. On the other hand, we must as freely admit that organic change in any part of the body is rarely affected to the extent of what we call cure by the use of drugs; in other words, the so-called specific treatment of disease is largely a delusion and a snare so far as drugs are concerned. In the treatment of morbid conditions let us not content ourselves until we have exhausted every diagnostic resource known to modern medicine, in every case that comes under our observation, in order that we may take a discriminating view of the situation, not only as regards the organs involved, but also as regards the extent to which they are involved. With a discriminating diagnosis, a familiar knowledge of the natural history of diseased conditions, and a well stocked armamentarium of therapeutical agents, not drugs and instruments alone, but all the forces of physical and natural therapeutics, such as water, plain and mineral, external and internal, of varying degrees of temperature, air, food, exercise, and rest, modifications of temperature and atmospheric pressure, electricity, mental and moral influences, (and, if you please, that faith which looks up and lays hold of the invisible), then are we prepared to pursue courses of treatment as widely different from each other as the conditions presented lift ourselves from the deep, worn rut of routine work and more nearly approach the ideal that we have heretofore done. Farther than this we must ever have in mind that the particular person that we are dealing with has his or her own peculiar idiosyncrasies, and it

Digitized by Google

therefore becomes a very important factor in the study and management of that particular case. No two persons being exactly alike, the external manifestations of disease in different persons are as different as the individuals themselves. By the aid of the microscope we are able to recognize the tubercle bacilla and positively inform our patients whether they are suffering from general tuberculosis or some benign disease, and by chemical and microscopical examination to more accurately diagnose diseased conditions of the kidneys than of any other organs so remotely removed from our senses of sight and touch. Is the day far distant when the same careful examination of all the excretions and secretions will be brought into use in diagnosing diseases of all the internal organs connected with the digestive tract?

Chronic disease is very insidious in its approach and very free from symptoms in the beginning; what symptoms there are being so remotely connected with the diseased organ that very often neither the person's nor the physician's attention has been directed to the real seat of the disorder. At this time the disease has ceased to be an entity, there is secondary implication of other organs, and the chances of a favorable termination are very materially lessened. It is often a surprise to our patients when they are informed that the discomfort from which they suffer is due to serious disease of some organ which they had previously considered perfectly healthy, and there are thousands of persons suffering from a condition of the system that may result in incurable organic disease at any time, which, however, may be averted by timely recognition and properly applied treatment.

That variety of chronic Bright's disease known as interstitial nephritis often manifests itself by muscular pains that pass as rheumatism, waterbrash, or other gastric symptoms that pass as dyspepsia, or a series of eye symptoms may lead a person to visit an oculist, who, by the aid of the ophthalmoscope, will tell him that his eye symptoms are all secondary to a serious lesion of the kidneys. Bright's disease unrecognized or neglected is a most dangerous foe to life, but when its existence is known and the person thus afflicted has common sense enough to order his life accordingly, he may, and in many cases will, have his life actually prolonged by the prudence which he will practice, owing to the existence of the disease; so that the person past middle life, who has Bright's disease and knows it, is often a fortunate man.

Incipient hip-joint disease often announces itself by pain and lameness about the knee. Almost every dyspeptic thinks he has heart disease, and a large percentage of persons with heart disease think their lungs are affected. Regarding the treatment of these primary conditions, much depends upon the disease itself, as well as the organ involved. In some instances the disease may be entirely removed by the knife of the surgeon; in other instances other organs may be stimulated to do the work of the enfeebled member. A person may so order his life as to relieve all severe strain on the weaker parts, but in no case should we relax our efforts because a person has a condition of some organ that we consider incurable, but should look about and find if there is not some condition that we can cure, and above all things, let us give careful attention to the use of physical and natural therapeutics, with special reference to the digestive, respiratory, and excretory apparatus. In many cases this curable something will be found in functional impediments to the entrance of nutriment into the medium of assimilation, and nutriment once put in, a cure is begun. It is seldom too late to try and administer to the failing organ the most potent of all remedies, the human blood of the patient himself, made healthy by the means adopted and flowing in continuously by its own natural channels.

EPILEPSY.*

BY JAMES L. GREENE, M. D.,

UNIVERSITY PLACE, NEB.

A question that has been asked by physicians and scientists for generations and which is to this day unsatisfactorily answered is, "What is the condition of the nerve centers that result in an epileptic convulsion?" I might add to this time-worn question a supplement, and say any convulsion. The generally accepted view is that the fit is caused by the sudden and violent discharge of nerve force, which discharge results in unconsciousness or convulsion, or both.

The function of the nerve cell is to store up and expend nerve force. In health this discharge is only in response to stimulus, or is a rhythmically performed function, as in the cells that furnish motive power to the heart and muscles of respiration, and even these rhythmic discharges are the result of stimulus. In the heart the stimulating agency being highly oxygenized blood, while the center that presides over the function of respiration discharges its impulse of nerve force in response to an exactly opposite condition, namely, a poorly oxygenized, or carbon-dioxide charged blood. But in certain diseased states all nerve cells may become morbidly unstable and discharge without stimulus, or in response to some abnormal stimulus, violently and suddenly.

The theory, therefore, that epilepsy is primarily a discharge of force from unstable cells is, for the present at least, the most reasonable explanation.

"It has been said that this is a theory only and cannot be demonstrated, but it accounts for the phenomena and should be valued accordingly. We should not despise theories, for they are the scaffolding by the aid of which all science has been built, and are necessary to progress. We are indebted to theories for much of our scientific knowledge, in medicine and out of it, and though

* Read before the Lincoln Medical Society.

Digitized by Google

the theories often bear but little resemblance to the facts to which they have led, they have at least held the lantern for man while he searched."

Many reasons for the molecular instability of cells that is exhibited in the phenomena of epilepsy have been advanced. One view commonly held is that this instability is due to some perversion of the nutrition through which the structure of the cell becomes faulty and therefore excessively unstable. In this view there is not necessarily a pathological condition demonstrable by the microscope, but some failure in the nutritive supply whereby the inhibitory power of the higher cortical centers are lost and a morbid instability, with involutary discharges, results.

Some writers have claimed that a constant factor in epilepsy is a degeneration of the cell nucleus, and guided by the teachings of physiologists, that in some way the nucleus presides over the nutrition of the cell, and also acts as an inhibitory or controlling center of the cell, they have sought to establish this condition as the true pathology of epilepsy. To an analytic mind it would seem that the cell changes are the result of repeated shocks from, rather than the cause of convulsions. With these exceptions there is nothing definitely known concerning the pathology of epilepsy.

Very early in my professional life I was impressed with the similarity of phenomena in convulsions from uremic poison, strychnine poison (in animals), the ordinary convulsions of infancy and childhood, and of epilepsy. This observation gave rise to the following mental problem: Given four cases in convulsions, one pregnant and uremic, one poisoned by strychnine, one suffering from convulsions at dentition, from the irritation of intestinal worms or a stomach filled with unripe and undigested fruit, and one epileptic. What course of treatment should be followed in each case? Rationally considered, the cases would be treated somewhat upon the following plan: In the first, remove the prime cause by terminating the pregnancy, if the complication antedate the full term. If at full term, relieve at once by all known means of rapid delivery. Aid the elimination of toxic agents by all the excretory organs, deplete the overexcited nerve centers and give sedatives. To be brief, in the folloiwng two cases the same general principles would be followed, viz.: Remove the cause and administer nerve sedatives. I think that I speak advisedly when I say that this would be the general rule of practice in such cases. But what of the epileptic? Regarding it as one of fully developed and positively diagnosed epilepsy, the tendency of the profession at large, at least those whose writings I have read, up to and including the modern work, recently published from the pen of Hirt, give as a rule an unfavorable prognosis and bromides.

This case of epilepsy evidently had a beginning, and it is then that treatment will avail most. It may be that the child, or adult, is the progeny of an epileptic or neurotic ancestor. If so, the prognosis and treatment previously mentioned would be good. But suppose the case to be one of the so-called idiopathic in its origin. It is then that the most careful study of every possible source of abnormal stimulus or irritation, central or peripheral in its origin, to unstable nerve cells will be of most benefit to the patient and of great gratification to the physician. For in many cases the cause can be found, and if removed in time the effect will cease. The causes are almost as numerous as the sands of the sea or the stars in heaven, and much patient investigation will be required. I mention here a few of the causes of which I have personal knowledge and which are removable: Depressed fracture of the skull or spinal canal; intra-cranial growths, when superficial; eye strain; irritation from granulated lids; irritation from entropium; carious teeth; eruption of the wisdom teeth; contracted scars in any part of the body, three instances of which I now call to mind. One following an extensive burn of the arm, one following contracted scars from hip disease, and one from irritation of a stricture of the esophagus. Intestinal worms of all varieties; stenosis of the cervix; an imperforate hymen, with retained menstrual flux; irritation of the glans penis from congenital phimosis; constant irritation of the stomach by indigestible artificial food, and one case that I am satisfied was caused by a rectal ulcer, aggravated by constipation, the first convulsion having occurred while the patient was at stool. Do not understand me to say that I have treated successfully all these cases. They are of those whom I know or have known and whose cases I have studied and know that I learned, at least, what caused the first and succeeding convulsions. In my opinion, prompt removal of the cause would have restored a large per cent of them.

Regarding, as I do, all convulsions as similar in their phenomena, and all due to the sudden and violent liberation of nerve force from unstable nerve cells, as the result of undue stimulus, from toxic agents, central or peripheral irritation, I watch with feverish interest every case that comes to me with convulsions from any cause. Especially the infant, or child, who has had convulsions at dentition, or during childhood from errors of diet, always endeavoring to impress the seriousness of the case upon the parents, that they may avoid a repetition of that, or any other cause or irritation, which would give rise to another attack of convulsions; for nerve cells that will in the beginning require a stimulus to liberate a discharge of nerve force, will become abnormally unstable after a few attacks of convulsions, and discharge without stimulus and thus the epileptic habit be formed.

SUDDEN fall of the temperature in typhoid fever is an indication of hemorrhage. If this is accompanied by a weak and rapid pulse, bleeding is almost sure to have occurred.

Digitized by Google

DIAGNOSTIC ERRORS.*

PREGNANCY MISTAKEN FOR ABDOMINAL NEOPLASMS—TWO CASES.

BY A. F. JONAS, M. D.,
OMAHA, NEB.,
SURGEON TO OMAHA HOSPITAL AND DEACONESS HOME.

However successful we may have been as practitioners of medicine, however long the series of recoveries from disease placed to our credit, none of our cases make such a vivid and lasting impression as those that have been recorded against us as failures. We have been led to look upon recovery from surgical procedure as the rule, and failure as the exception. Success is demanded and expected of us, and deserves no particular credit; failure is a stigma which carries with it an odium that few can bear. We stand or fall by the outcome, not by the skill and care exercised.

We all know of operations that were masterpieces of blundering stupidity, but the patient survived in spite of the mutilation, in spite even of the operator, and his bunglesome meddling was magnified into an operation of marvelous skill and unparalleled dexterity. And we have seen so many times a fatal termination follow the most carefully planned and conscientiously executed operation. Our medical literature teems chiefly with success, and only now and then are the failures pointed out. One grievous fault of the medical literature of these closing nineteenth century days is the tendency to magnify our victories and bury our mistakes; the tendency of careless and, we may say, willful misrepresentation in the report of cases; the tendency to justify a course of procedure when all that was done was not only useless, but oftentimes detrimental and harmful. We may say the greatest curse with which our periodical literature is burdened is the willful misrepresentations and the premature report of alleged results.

It seems very natural that we all should desire to appear at our best, and I fear that colored and garnished reports are often intended only as a screen behind which to hide painful blunders which pursue like Banquo's ghost "which will not down."

Speaking from my own experience, I am free to confess that those cases which arise before me most often are those in which I have been guilty of error. My successes seem like so many flashes of an intense and brilliant light which lasts only an instant, to be obscured by an intensely black shadow which represents the failures. The pleasure of a list of twenty-five to thirty successive successful abdominal sections is entirely destroyed by a single death. A careful study of a single unfavorable case will sometimes throw more light upon our methods than a long list of favorable ones. It seems to me the time has come when we will derive more benefit from publicly discussing sources of error and misunderstood manifestations than brilliant achievements, not as supreme judges of others' work, for that has always been the rule, but as critics of the outcome of our own efforts.

Several years since I promised a series of papers on diagnostic errors. At that time I read one before this society, and it was later published in the Medical Record, of New York, on a case of "Intestinal Enterolith," mistaken first for appendicitis and then for carcinoma of the ilio-cecum.

This evening will be the second paper on "Diagnostic Errors in Abdominal Enlargements," which will be illustrated by the following two cases:

CASE I.—Mrs. S., aged 28; farmer's wife. She was seen first in company of her husband in September, 1892. She was well nourished, healthy, of robust appearance. She had consulted two well-known and experienced physicians at her home in reference to an abdominal enlargement, who declared that she was the possessor of an ovarian cyst, and she was recommended to me for an operation. Her abdomen was found to be enlarged to the size of a full-term pregnancy. The abdomen was symmetrical, without pain or tenderness. Fluctuation was distinct and circumscribed, and on deep palpation no resisting parts could be made out. Per vaginam the os uteri was firm and hard, bearing evidence of slight bilateral laceration, the result of confinement two years previously. While the cervix was of ample length, it seemed normal, but the corpus uteri could not be made out, as we thought, owing to the high position of the organ in the pelvis. A speculum examination disclosed nothing abnormal in color of mucous membrane or conformation of cervix. A uterine sound, carefully introduced, entered two and three-fourths inches. She had menstruated irregularly, but very scantily, for seven or eight months. She was carefully quizzed in reference to the possible existence of pregnancy, which she herself denied. She had had "no morning sickness." Had felt no fetal movements nor parts of the child through the abdominal walls, as she had with her previous pregnancy. Her abdomen was palpated while she was in every position. Balottement in upright and recumbent posture negative. No fetal heart sounds could be heard, although auscultation was carried out over every part of the abdomen. No enlargement of breasts, nor did they contain milk or serum. Pregnancy was strongly suspected. Dr. B. F. Crummer kindly saw the case with me. While we both discussed the possibility of pregnancy, still the weight of evidence seemed in favor of an ovarian cyst. Since some doubt existed, and no immediate interference seemed to be indicated, we advised her to go home for a time, which she did. She returned, however, in about two weeks. She entered the Methodist Episcopal hospital, where she was kept under observation for several days. I examined her daily. Never could fetal parts be felt, no heart sounds heard. In fact, with every examination the few signs of pregnancy that had existed gradually disappeared, and I believed more and more in an ovarian cyst.

* Raed before the Omaha Medical Society.

Digitized by Google

On October 3, after the usual preparations, under the influence of chloroform, the abdomen was opened, and at once it was evident that we had a presenting uterine wall. The introduction of a hand low down into the pelvis could now distinctly make out a child. Dr. Crummer, who assisted, confirmed the existence of a pregnancy. The abdominal as well as the uterine walls were found to be very thin, and the cavity contained an unusually large quantity of amniotic fluid. The abdomen was at once closed, and the patient put to bed. The abdominal incision united per primam. The woman went home on the sixteenth day. On the day of her departure the husband came to me, asking me for my bill. I replied, "Mr. S., I made a mistake in the case of your wife, and I have no bill against you." He was sulky and replied that he felt sure that I did not yet know what ailed his wife, because no one could convince him that a man could tell what "was in a woman's belly after having his hand in there no longer than five to ten seconds." He intended to watch the case, and if it turned out that his wife had a tumor after all, he would make it hot for me. They went home. In about ten days he wrote me that before they got home his wife began "shedding" and she lost about two gallons of water, and three or four days after her arrival at her home she gave birth to a still-born child.

In reviewing this case I now feel that I was at fault in several particulars. I should have made an exploration under an anesthetic. The thin and tense abdominal and uterine wall, the large amount of liquor amnii, the hard, firm, and unchanged cervix uteri, gave the impression of a cyst. Under an anesthetic, with complete relaxation of all structures, it would have been possible to have felt parts of the child.

CASE II.—Mrs. J. E., aged 26; farmer's wife. Was called to visit her at a distance from the city on August —, 1893. On approaching her residence with her family physician she could be heard screaming. We found her throwing herself about in bed, complaining of severe pain in the region of the bladder. Dr. Taggert at once proceeded to introduce a catheter, which entered to a distance of six inches and drew from her bladder one and one-half chambers full of urine. He informed me that he had succeeded in drawing that amount three or four times every twenty-four hours for the past two days. She then received gr. i morphia, hypodermically, before her pain disappeared. On examination the abdomen was found to be distended to the size of a full-term pregnancy. Part of this enlargement was due to gas. A resisting body reaching above the umbilicus was found, slightly movable, and seemed to fluctuate. Per vaginam the cervix was found high up and the os uteri pointing directly toward the pubes; behind the cervix and extending backward and downward almost to the perineal body existed an enlargement, its lower part rounded and circumscribed, and presented the condition of a retroflexed uterus in the fourth month of pregnancy. The diagnosis was made of a pregnancy in the fourth month. A neoplasm, probably cystic, which had existed before the pregnancy, and that this neoplasm, by pressure, had retroflexed the uterus and had crowded it down, and that the neoplasm had also, by pressure, interfered in some way with the urinary flow. The urinary difficulty, the recurring agonizing pain, seemed to call for urgent surgical interference. Accordingly, the following morning she was brought to the Omaha Deaconess Hospital for operation. Upon her arrival at the hospital another examination disclosed nothing new in the physical condition. The urinary analysis indicated albumin nearly 25 per cent. With this condition of urine it was not thought prudent to proceed immediately. Salines were ordered until several watery evacuations were produced. The following morning all bloating had disappeared. The abdominal mass could be more easily felt, and as it was moved the finger in the vagina determined that the cervix and supposed retroflexed uterus moved with the mass above. We then believed that we had to deal with a subserous fibroid and pregnancy. Placing the patient in knee-chest position, hoping in that way to relieve pressure symptoms, and after a continuous pressure against the vaginal mass for ten minutes, it began to recede, and suddenly disappeared entirely, the cervix assuming its normal position in the vagina. All pain at once disappeared and urination became voluntary. Dr. E. W. Chase saw the case with me the following day, and we were able to substantiate a normal pregnancy at about six months. The albumin disappeared in about ten days. She returned home and miscarried two months later.

Viewing this case in the light of subsequent events, it is not difficult to see that we had to deal with a uterus that became impregnated while in a state of retroflexion, or became retroflexed soon after conception. The fundus, or a portion of it, became wedged under the promontory of the sacrum, while the anterior portion of the upper uterine segment continued to develop upward, producing in the lower pelvis a diverticulum which simulated the uterine fundus.

In both our cases an error in diagnosis was made. The first might have been avoided if an anesthetic had been used while an examination was being made, or if we had made another thorough examination when the patient was on the table for operation. In the last case an abdominal section was not made on account of the accidental presence of albumin in the urine. The delay thus caused enabled me to accidentally correct the condition which I had not suspected.

The object of this report is to illustrate how easy it is to overlook very important features in a diseased condition. How what at a later date seems so plain can lead us into errors of judgment. How we often attach great importance to really trivial evidence, and almost entirely neglect the

Digitized by Google

essential features of the case, and, above all, fail to avail ourselves of simple diagnostic aids.

No teaching has been fruitful of more harm and of useless surgery than that of declaring the harmlessness of an abdominal section. To say that it matters not what the intra-abdominal condition, an exploratory incision will reveal all, is to encourage useless cutting and discourages the search after diagnostic landmarks. Instead of inducing men to become careful, thoughtful students of scientific medicine, it produces a class of blood-thirsty mechanics, who never fail to embrace an opportunity to cut. We must strive after more accurate diagnosis, so that we may prevent useless surgery.

SOME OF THE FALLACIES IN THE PRACTICE OF MEDICINE.

BY GEORGE W. WILSON, M. D.,

BERTRAND, NEB.

The practical side of science is too conservative to be led astray by the numerous fads of the times. Contingencies may arise and vagaries flourish for awhile, but time, the great arbiter of events, will give the profession a brighter and a bluer sky. As art and science progress, so do crime and fads flourish, and with all the crowning achievements of this century and its amazing revelations, the brilliant notes of progress will be marred by failures and blunders. Notwithstanding the great advancement and progress in medicine and surgery, people get ill and die. If we are to judge by the numerous compounds and specifics that are liberally advertised and graciously recommended by many, human life ought soon to have a longevity sufficient to satisfy the craving of average humanity.

Some time in the past we had the "Burgeon theory," and it had a few followers that gave it plaudits; but how many are there to-day that would admit having used so repulsive a remedy? In its wake was the "Brown-Sequard" elixir of life;" that has gone to the happy hunting ground. Then "tuberculin" was announced as the foe of consumption, and yet consumption holds the fort. Alas! the "Keeley cure," and now where is it? Diphtheria, the dread of millions and the foe of many, has its antithesis in antitoxin; and now we have the "horse serum" knocking at the door of medical science for recognition.

In all ages there are men that do a vast amount of good thinking, while others are too lazy to think a thought, and the recuperative current of the gray matter is sluggish, and there are many jostling against each other trying to get into the band wagon of progression, thereby taking a short cut and cheap road to fame,—such men are found in the list that are praising every fad as soon as it is announced. Some fads are perennial, appear and reappear, while others, like some comets, appear and disappear unheralded and lost in the mist of conjecture.

ANOMALOUS TREATMENT.—In the complex system of medicine some try to build up, while others try to tear down; some blow hot, while others blow cold; some give stimulants, while others give sedatives for the same purpose, in a therapeutical and pathological sense. And while such anomalous treatment is perpetrated upon a confiding public, the anomaly is calculated to lower the tone of scientific medicine. Scientific medicine does not admit of incongruous statements. Many therapeutic agents are recommended for certain diseases, and at the same time they are in sharp contrast with the pathology of the case and physiological requirements. Many heterogeneous compounds contain ingredients that are not therapeutically homogeneous, and chemical affinity would be incorrigible. Some synthetical compounds are recommended to disintegrate the vile pathological products and eliminate them, while, at the same time and by the same process, they are recommended as having a cumulative and generic force! Such heterogeneous compounds, with a shot-gun policy, may do to fool the modern bacilli. Why do we have anorexia in diphtheria and such a rebellious treatment? Take the varied list of remedies recommended and compare them with the pathology of the disease, you will find a glaring anomaly. No wonder a suffering public sounds such discordant notes. If we would use our brains more and not use a set formula, our patients would profit thereby. When will the profession build a system of therapeutics worthy of the struggle of science?

Medicinal agents should be given for the express purpose of a benign influence, to correct the natural process of waste and repair, to eliminate effete material and assist nature to hold in balance a conservation of vital energy in the constructive and reconstructive forces. As years come and go, and as the shadows of the nineteenth century are gathering for a final close, science will be called on to perform the last sad rites over the remains of many fads.

TETANUS ANTITOXIN—REPORT OF CASE.

BY J. W. COKENOWER, M. D.,

LECTURER ON ORTHOPEDIC SURGERY, COLLEGE OF PHYSICIANS AND SURGEONS, MEDICAL DEPARTMENT, DRAKE UNIVERSITY,

DES MOINES, IOWA.

One by one the diseases which have hitherto defied the skill of physicians are yielding to the persistent attack of modern science. Since the successful treatment of diphtheria by subcutaneous injections of antitoxin serum was demonstrated, it has been confidently predicted that sooner or later all diseases resulting from the action of a poison secreted in the blood by a special and characteristic bacillus would be conquered by similar means. Tetanus has its characteristic microbe, which has been recognized, isolated, described, and reproduced by artificial culture. The distinguishing symptom of tetanus is a persistent

Digitized by Google

spasmodic spasm of the voluntary muscles, aggravated by light, noise, or other disturbing influences to which the patient may be subjected. These spasms may affect any muscular portion of the body, but when, as is often the case, the maxillary muscles are principally involved, the result of the malady is usually known as "lockjaw."

I was called on December 20, 1896, at 8 o'clock P. M. to No. 145 Twentieth street, Des Moines, to see John Wilburg, age forty-six, who was suffering with, as they supposed, neuralgia of the head and neck. I proceeded at once to get the history of the case, as well as that of the patient, and found that he was of German descent, and had never been sick in his life, so far as he knew, save an injury or two received a few years ago, from which he had entirely recovered; but aside from this, had always enjoyed the best of health. He was married and had four healthy children, and from his story I could find no cause for the supposed neuralgia of the head, except exposure a few days previous. However, upon further inquiry, I ascertained that upon December 10 he let a brick fall, striking upon the great toe of the left foot, producing a discoloration of the nail and a slight abrasion of the skin on the dorsal portion of the same toe, which did not give him much pain at the time, and caused no inconvenience in the future, and he continued his work the same as before, not thinking the injury sufficient to give it any attention whatever; but, upon the following Saturday, December 19, he fell from the roof of his barn, a distance of about twelve feet, resulting simply in a general "shake-up," without any injury whatever, and even this did not prevent him from continuing his avocation as before. Upon close inquiry I succeeded in eliciting the fact that he had been having a stiffness about the neck and difficult deglutition for two or three days past, a fact that he did not think worthy of attention and simply, in his opinion, was the result of exposure incident to his avocation, that of hauling brick, but, in reality, in my opinion, was the beginning of what ultimately proved to be the end.

Upon a closer examination of the patient, I found a pulse of 120 and a temperature of 102, with spasmodic pains, the body assuming the position of opisthotonos, no part touching the bed, except the heels and head, the arch being that of nearly a semicircle, producing typical tetanic spasms, spastic masseters, with trismus, diminution of the visual angle, and apparent permanent spastic contraction of the orbicularis palpebral muscle, with difficult deglutition and irregular respiration. The pain was not constant, but came periodically, and with the spasm incident to tetanus. I informed the family that, in my opinion, the case was one of tetanus, or lockjaw, caused by the injury to the great toe December 10, which very much surprised them and their friends, because it seemed that they had heard or knew enough of the disease to know what it meant. I gave him nerve sedatives and anodynes for the night and called the next morning, December 21, at 8:30. Found no material change in the patient from the evening before, save that the respirations were made with more difficulty and the temperature 101 and the pulse 140. I realized the severity of the disease and, also, that in reality the beginning of the first symptoms of the disease could be dated as far back as Friday, December 18, so that there had been three and a half days elapsed since that time. I advised the family to have consultation, and Dr. Lewis Schooler was called, who confirmed by diagnosis, and was of the same opinion as myself, that if anything would stop the ravages of the disease, it would be tetanus serum, and we even doubted the effectiveness of this treatment on account of the lateness of its beginning, there having been almost four days transpired since the introduction of the disease. I secured forty cubic centimetres of tetanus antitoxin, or serum, and at 4:30 P. M. gave subcutaneously four cubic centimetres, but not without first giving the patient some chloroform by inhalation to quiet the spasms produced by any noise or touching of the patient.

Perhaps it would not be out of place here to state that in using the serum I asepticised the field of operation, as well as the Mulford syringe used, and was careful to not permit any air to enter the syringe or serum, and, after using, covered the surface with aseptic gauze, retained with adhesive straps. At this time, the spasms were occurring seventy-five per hour when the patient was not under the influence of chloroform. I had taken the precaution to have the patient's bowels to move freely, after which gave food or cod liver oil, beef tea, and egg per enema every six hours, and when the patient was unable to retain food given in this way, I resorted to feeding by means of absorption of olive oil and quinine, administered through the medium of a saturated cloth around the body, covered with oiled silk, as deglutition was impossible without aggravating the spasms, and the teeth being firmly set. Realizing that whatever effect I got from the serum would not be instantaneous, I gave hypodermically 1-50 grain physostigmin, with a half grain of morphine hypodermically, which was repeated every three hours, or as much oftener as necessary to control the spasms and produce some sleep.

December 22, at 3:30 P. M., I called and found no material change in the patient from the preceding evening, save the spasms were not quite so frequent, a fact which I accredited to the persistent use of physostigmin. I gave at this time six cubic centimetres of tetanus serum, and in four hours, ten more, making twenty that had been given up to this time. After the last injection given of the serum the patient remarked: "My jaws feel more limber and my neck not so stiff." Believing that I was getting some result from the use of the serum, I determined to push it, and secured another bottle of serum containing twenty cubic centimetres, and gave it in two administrations,

Digitized by Google

six hours apart, during and after which the patient seemed to be convalescing; the spasms now, instead of being seventy-five, were not more than ten per hour, and even then not anything like so severe, and we felt that there was some hope; but there being a question in my mind as to the advisability of using more serum and not being able to secure even if I did, it was all that the case was given, and the patient seemed to be improving slowly, with normal temperature and pulse of 100, and respiration of 30, but somewhat irregular, due to the spasms. This condition of affairs continued without any marked variation until Thursday morning, December 24, when there was a turn for the worse and the spasms were increasing in number and severity, and the outlook was anything but favorable. I am satisfied that had I had forty cubic centimetres more of serum at my command, I should have made use of it. This, however, I did not have, and all that was left to be done was to quiet the spasms with inhalations of chloroform and antispasmodics, which I did until the end came at 2 o'clock A. M., December 26.

My experience with tetanus serum in this case has been sufficient to convince me, beyond a doubt, that when it is used aseptically, plentifully, and timely, we may expect good results from it, because in this case, even after four days had elapsed from the onset of the disease, the result from its use while being used and for a limited time afterwards was entirely satisfactory, and the result so marked that even the family and friends noticed the marked improvement in the case; the respirations were better, deglutition became possible, but in a limited degree, and the heart's action was better and continued to be so, and the patient's intellect seemed to be improved; hence, I have no hesitancy in saying that there is a field of usefulness for tetanus serum in this dreadful malady, and no physician should hesitate to give it a trial upon the least provocation. The experience that I have had with tetanus has fully aroused me to the importance of prompt and immediate action, and, in all cases where there is any danger of this malady, and whenever there is an injury to any part of the body that is liable to produce it, shall subsequently govern myself accordingly, and give the serum as the best known prophylactic treatment.

REPORT OF A CASE OF VESICAL CALCULUS—OPERATION.*

BY J. O. DAWSON, M. D.,

SURGEON ST. ELIZABETH HOSPITAL, LINCOLN, NEB.

On November 10 I was called to see Harry R., and found a young man twenty-six years old with the following history: Up to five and one-half years ago had enjoyed good health; well developed and active. In the summer of 1894 he fell from a building, fracturing the lumbar vertebra, causing complete paralysis from hips down. From that time on he could not pass his urine and had to have it drawn. The last two months he has been unable to pass the catheter or have it passed; the urine dribbled away, with quite a quantity of pus. About eighteen months ago an operation was performed for removing the pressure of the lumbar cord, with some relief of sensation and motion, but which did not relieve the bladder. At the time I was called he was very weak and suffering great pain in lower bowels. Pulse 85 and weak; temperature 97; quite emaciated and nervous; poor digestion; tongue coated brown, with red edges; skin dry. On passing a sound I found a large sized stone in the neck of the bladder, which extended into the urethra. It could not be dislodged with the sound, and I advised an operation. But stated to him that it was a risky procedure in his condition. He said he would take the chances, as he could not longer stand the extreme pain. I had him prepared for an operation and on the 13th made a suprapubic cystotomy. After dividing the tissue, just above the pubis in median line down to the bladder, I made an opening through a very much hypertrophied bladder wall. Introducing my fingers I found a large stone, with the bladder contracted around it so firmly I could not move it. I then took a strong pair of stone forceps and applied eight or ten pounds traction without dislodging it, but by the use of an elevator and forceps finally removed the upper half, after quite a quantity had crumbled, which was removed with a scoop. On examining the part removed I found it had an articulating surface. I introduced my finger and found still a larger piece remaining. Forceps and elevator again in use, I brought away the remaining piece with a nodule three-fourths of an inch long that extended into the urethra. I then washed the bladder thoroughly with hot boric acid solution and closed the bladder—except room for irrigation—with catgut, and external wound with silk. He was put to bed with a temperature of 96.

The patient rallied nicely and had no more pain. For ten days he did extremely well. The bladder was washed with boric acid solution. On the tenth day he complained of pain over the region of the kidney, with nervous sensations passing over him, and no appetite, with a sub-normal temperature, and died on the fifteenth day after the operation.

Dr. W. S. Forbs, of Jefferson Medical College, st... the rate of mortality in young males from suprapubic cystotomy is much higher than that following perineal lithotomy, and advised crushing with his instrument, which will produce 650 pounds pressure. I think if we had a safe lithotrite and without doubt remove all the fragments, I would prefer it to any form of lithotomy. But in this case I could not use a lithotrite on account of the extreme impaction and size of stone. In large stone, and if impacted or encysted, I would advise a suprapubic operation, as we have the pre-

*Read before the Lincoln Medical Society, December 22, 1896.

Digitized by Google

vesical space in the healthy bladder high enough above the pubes to permit the removal of the largest stone without opening the peritoneal cavity. By distending the bladder with water or air, the line of peritoneal reflection can be seen to rise fully four inches above the pubes. This being true, it is of great importance to the surgeon in making suprapubic operations. But in a diseased condition of the bladder the space may be so limited as to prevent entering the bladder without entering the peritoneal cavity. And that was my fear in this case, as I had to deal with an extremely hypertrophied bladder wall, with a large impacted stone, just the condition that obliterates the prevesical space. The total weight of the stone removed was 1,080 grains.

CHINESE EUNUCHS.—In China the emperor and certain members of the royal family are alone entitled to keep eunuchs. His majesty maintains at least 3,000, but no prince of the blood or imperial princess has a right to more than thirty. Theoretically the palace eunuchs are furnished by governors of provinces, each of whom has to supply eight every five years, receiving in return 250 taels per eunuch. It was found, however, that the number thus obtained was totally insufficient, so a recruiting office was established at Pekin for the direct enrollment of candidates. In the production of Chinese eunuchs four chief factors prevail, viz., greed, predilection, poverty, and laziness. Many parents sell their male children to the mutilators or themselves castrate them, in the hope of eventually sharing their earnings. Young men of from twenty-five to thirty years of age, some of them having wives and families, often accept emasculation, being allured by the prospect of emolument. Poor wretches destitute of means and threatened with starvation agree to become eunuchs in order to gain a living. Finally, a certain number of lazy, good-for-nothing vagabonds sacrifice their manhood to secure a life of indolence. The operation is performed in a building situated close to one of the palace gates, but the operator, although his office is a recognized and hereditary one, having been for many years in the same family, receives no regular wages, being entitled to a fee of six taels from each individual operated on. In the case of destitute candidates he exacts a lien on their prospective earnings. Dr. Matignon's description of the operation is as follows: The subject, with his abdomen and thighs tightly bandaged, is placed supine on a low bed, one assistant grasping him firmly round the waist, while two more keep his legs widely separated. The operator, as a rule, uses a curved implement resembling a pruning knife, but occasionally he substitutes for it a long pair of scissors. With his left hand he seizes the parts, squeezing and twisting them to diminish the supply of blood; but before cutting he inquires for the last time whether or not the patient is a consenting party. Adults, of course, answer for themselves, no anesthetic being used, but in the case of children the parents' word is accepted. The reply being in the affirmative, a single rapid sweep of the hand serves to remove both penis and scrotum, the blade of the instrument passing as close as possible to the pubis. A small piece of wood or of pewter, shaped like a nail, is then inserted in the urethra; the wound is washed two or three times with pepper and water; and several sheets of paper having been applied to the raw surface, the parts are carefully and tightly bandaged. The subsequent treatment is remarkable. Immediately after the bandaging the unfortunate patient is seized by the assistants and made to walk up and down the room at a rapid rate, not being permitted to lie down for three hours. For three days he is not allowed to drink anything, and not only does he suffer the pangs of thirst, but also has to endure the agonies of retention, owing to the plug in his urethra. On the fourth day the bandages are removed and the wretched creature is suffered to pass urine if he can. If the urine flows he is looked upon as cured, but should the overstrained bladder refuse to act he is left to die, the virtues of catheterization being apparently unknown to the Chinese. The amputation leaves a large triangular wound with the apex downwards, which takes on an average about a hundred days to granulate. Notwithstanding the primitive mode of procedure, the operation is usually successful, and fatal cases do not amount to more than three or four per cent. The most frequent complication is incontinence of urine, but if this unpleasant symptom continues beyond what is considered a reasonable period the patient is condemned to flagellation, a mode of treatment which is said to yield the most excellent results.—The London Lancet.

ALVARENGA PRIZE OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.—The College of Physicians of Philadelphia announces that the next award of the Alvarenga prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about $180, will be made on July 14, 1897, provided that an essay deemed by the committee of award to be worthy of the prize shall have been offered. Essays intended for competition may be upon any subject in medicine, but cannot have been published, and must be received by the secretary of the college on or before May 1, 1897. Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper, and within the name and address of the author. It is a condition of competition that the successful essay, or copy of it, shall remain in possession of the college; other essays will be returned upon application within three months after the award. The Alvarenga prize for 1896 was not awarded.

DR. WILLIAM PEPPER has succeeded in securing a skiagraph of an aneurism.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$2 00
Single copies..... 20

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, JANUARY 15, 1897.

WHAT OF THE FUTURE?

In another column we have copied a part of an editorial from the Medical News entitled "The Passing of the Physician." The article is gloomy, doleful, and anything but optimistic in regard to the future of the profession. And, sad to relate, it is too true to laugh away. While there may not be many physicians who so far give up the struggle as to "turn on the unlighted gas," there is many a one who feels like giving up in disgust. But Brother Goffe is a little too pessimistic. There is a remedy. The disease itself will supply the remedy. But not yet. There will have to be more so-called colleges organized, more free dispensaries opened, and a few more free clinics for the dear people before the time will have come for the remedy to be used.

The time has been and exists to-day, for that matter, when it was necessary for the physician and surgeon in a city to become connected with some of these free doctoring concerns before he could hope to be recognized. And whether this is true or not the majority of the profession think so, and if there is no free dispensary open to them, it is not much trouble to organize one. The oversupply of medical colleges to-day is the result of the same desire to become a professor and for the prestige it is supposed to give. The ambitious one looks around him and trys to wedge himself into some of the schools, and, failing in this, he, with with kindred spirits, join together and proceed to organize another college. And the more colleges the more students, and the more students the more doctors, and the more doctors the more colleges. And there you are, in a continued circle, ever increasing. But it will stop sometime, but possibly not till the profession has got into such a condition that the suicidal work shall have brought it to such a low state that self-respecting men will be ashamed to belong to it. If all the states in the Union would do what a few of the states have already done, not recognize a college diploma as a qualification for registration, we might hope for some relief from this. While a large number of our medical colleges are everything that could be desired, there are so many that are inferior or bad, and it is so utterly impossible to make medical laws that shall be just, and allow discrimination, and it is so hard for health boards to decide in many cases, that it resolves itself into the refusal of recognition of any diploma.

There is another glimmer of sunshine in the gloom, and that is, a college professor will soon become so common and it will mean so little that the honor and value attached to the title will have vanished. Then the average doctor in cities won't sit up nights trying to devise some scheme by which he can work himself into a medical college faculty. And sometime in the near future, it is to be hoped, gentlemen who spend practically all their time and energy teaching in colleges, doing free work in free hospitals, and practicing in free clinics without remuneration, will awake to realize the fact that it does not pay. Then the medical profession will form themselves into a union like other workingmen, and will strike, not for higher wages, but for honest remuneration for honest toil. To-day three-fourths of all the work done in the larger cities is gratuitous, even to the extent of not being paid for with thanks.

But, thank heaven, this state of affairs has not reached, and never will reach, the country practitioner. He may not wear the fine broadcloth and the spotless shirt front, or the "silken tile," but when night comes, and his day's work is done, the coarse warm clothes are covering a light heart and a full stomach, the exact opposite, in too many cases, of his finely dressed city brother. He, discouraged in waiting and working for the hoped-for reward, which never comes, finally gives up, and, more often that is commonly believed, "turns on the unlighted gas," or in other more scientific way, puts an end to the struggle. On his tombstone may be written "He was good to the poor," but in the inner recesses of his broken heart will be the sentence, "My life was a failure."

THE GONOCOCCUS.

Since Pasteur's great discoveries the energy of the medical profession has been largely directed towards the biological and morphological study

Digitized by Google

of bacteria. The result has been beneficial alike to the physician, the surgeon, the pathologist, and the diagnostician. From such study the gain to medicine, in the field of diagnosis alone, is of the greatest importance; for correctness in diagnosis is not only one of the evidences of a skillful physician, but is fundamental to scientific treatment. Especially is this true if the diagnosis involves, as it usually does, a knowledge of the existing pathological conditions. If possible, a still more important need of recognizing the disease is felt in its bearing on preventive medicine. The spread of contagious diseases often results from faulty diagnosis; thus showing, in the urgent need of correctness, the responsibility of the practitioner. But even when contagion is not a factor, he must often feel the embarrassment of doubt. Whatever tends to lessen this doubt, therefore, will add to the doctor's peace of mind, as well as to the welfare of the public health. A good illustration of the point in hand may be found in gonorrhea and the additions made by recent research to our knowledge of the natural history of the gonococcus, rendering its recognition less a matter of doubt.

Dr. Heiman, in the Medical Record of December 19, 1896, gives in a second paper the results of additional and more exhaustive study and research into the biology of the gonococcus. The experiments were made in the bacterial laboratory of Columbia University, New York. The exhaustiveness of the research and the care with which the work was done show clearly the methods of the inductive philosopher. The care and labor expended upon these experiments give additional proof also of the ceaseless and untiring search in our profession after exact facts. The simpler methods of collecting the material by the aid of a sterilized platinum loop has been abandoned for sterilized tubes available for the centrifuge. While this method will make it impracticable for the great majority of physicians to make cultures, it has the advantage of allowing the material to be sent to the better equipped laboratories. Still further obstacles are thrown in the way of the ordinary practitioner, because of the fact that the usual culture media will not answer. Experience has convinced Dr. Heiman that albumin which has been coagulated by heat will give only negative results. Meat effusions obtained at a temperature below that at which albumin coagulates are but little better. However, a drop of blood, from the finger, smeared upon a nutrient agar plate or tube, and planted with gonorrheal pus and kept at body heat will give positive results. This method is inexpensive and easily available. Still, our author found it open to many objections and sought to find a better one.

A point upon which the experimenter lays much stress is that "Fractional sterilization of serum should be continued longer than six days, and after an interval of two or three days it should be sterilized again on three successive days." The sterilization is done by keeping the chest serum at a temperature of 65 degrees C. Such serum coagulates at about 80 degrees C. If it over coagulates the gonococcus will not grow on it. An evident advantage of the chest-serum agar is that while the specific germ of gonorrhea thrives in it, other pathogenic bacteria, with the exception of the streptococcus, does not grow so well as in other media.

The doctor has demonstrated that in chronic urethritis of two to four years' standing the gonococcus still lingered in many cases and could be cultivated.

Desirable as it was to have a liquid culture medium in which the gonococcus would thrive, yet no such one was known, and so he set himself the task of discovering it. His researches were highly successful; for instead of finding one he found three. The following is the formula for the one he prefers:

"Sterilized Liquid Chest Serum—1 part (pleuritic effusion) plus 2 per cent of agar plus 1 per cent of peptone plus 0.5 per cent of salt, 2 parts."

Hydrocele fluid is almost as good as the pleuritic effusion. Hydrocele fluid plus 2 per cent of nutrient agar makes a soil favorable to the growth of the gonococcus if planted with gonorrheal pus.

The fluids above mentioned, the author thinks, are readily obtainable. However, many who would like to make the culture will not agree with him. In these old cases the bacteria are not plentiful, so that microscopical examinations, when no culture has been made, may give negative results, even when the germ is really present. Cultures in such cases are, therefore, much more reliable than cover glass examinations. The doctor demonstrated this. After getting negative results upon repeated microscopical examinations, he succeeded in obtaining cultures. So that in chronic cases, at least, he is of opinion that cultures alone are to be relied upon for certainty of diagnosis.

The practitioner is often asked by his patient, who may be a married man, or one who contem-

Digitized by Google

plates marriage, or whose wedding day is near, whether he may have sexual commerce without risk of infecting the woman. The question in many instances would require a microscopical examination, and if doubt still remained, the making of cultures, the latter having proven the more reliable. If the doctor hazard an answer without exact knowledge, the results may be disastrous. Without exact data on the subject, we venture the statement that among surgeons there is a consensus of opinion that a large proportion of operative pelvic troubles in women are due to gonorrheal infection. If this is true of the graver cases it will, of course, hold good in the milder ones. That the infection is often brought about through ignorance can no longer be doubted.

As to the reliability of Dr. Heiman's methods, they seem to be trustworthy. In twenty cases of acute gonorrhea he got positive results in all. This would seem to give a high degree of certainty in diagnosis, which is most gratifying, for only a few years ago our most skilled specialists, if called as experts, could not have stated in a given case whether it was one of simple or specific vaginitis. Many came to doubt if gonorrhea was a specific disease at all, and if it were there was no sure differentiation. This was not only true in cases of adults, but more especially in those of colpitis in children. Here, as in diphtheria and many other diseases, the researches of the bacteriologist have rendered the greatest service to the profession, by giving them the means of greater certainty in diagnosis.

THE WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

The profession of this section of the mid-western region, or this great trans-Mississippi country east of the Rocky mountains, should be congratulated because of the great success of the recent meeting at Topeka of the Western Surgical and Gynecological Association. This sixth anniversary of the organization was celebrated in the place of its birth. Its great growth and still greater prospects is most gratifying to its officers and members and is a monument to the wisdom and foresight of its founders and projectors. The association has been modest and unassuming, doing its work in a quiet way; the profession as a whole scarcely being aware of its existence. The membership, comprising a large share of the leading spirits in surgery and gynecology in this section, have had but to speak and are now heard. There is no reason why this vigorous body, composed, as it is, of our most representative western men, should not take rank with similar organizations in the east and south. The admirable program, with its able discussions, warrant this prediction. The enthusiasm of the Topeka meeting made it manifest that this one of the many new societies has a very flattering future—"There always being room at the top." Dr. Joseph Eastman, of Indianapolis, was elected its president, and both feel honored. Denver will be the next place of meeting, holiday week next winter. This will still further extend the territory, strengthen and improve the association, and increase proportionately its usefulness and prestige. After the Denver meeting the society should make its circuit more complete by moving northward. Minneapolis or St. Paul would be a good prospective point. The profession in all portions of the society's territory should be awake to their own interests and let it find expression through the medium of this agency. There is a large class among the more progressive practitioners who do considerable surgery and gynecology; all these should become identified with this organization, and thereby become a force for advancement in this field; also help to give our western profession its merited place, and proper recognition of its work and worth, now too little known and appreciated by the world, and ourselves as well.

COMPLIMENTARY COMMENTS.

As we enter upon the second year of the WESTERN MEDICAL REVIEW we cannot refrain from publishing the following extracts from among the many congratulatory letters we have received during the last month. We are trying to make the REVIEW the very best medical journal of the west, and we recognize the fact that our efforts are being appreciated:

A. H. Hostetter, M. D., Douglas, Neb., December 17: "I consider it the best medical journal published in the west. I must congratulate you on the general make-up."

J. W. Bullard, M. D., Pawnee City, Neb., December 17: "Allow me to compliment you on the able manner in which you are handling the REVIEW. What a feast of good things it contains every month. It is worthy of a very large subscription list."

M. T. Zellers, M. D., Hooper, Neb., December 18: "The profession of Nebraska should feel exceedingly grateful for a medical journal which compares favorably with the great journals of the east. The WESTERN MEDICAL REVIEW is an honor to its editor and a boon to the profession at large."

Seth Scott Bishop, M. D., LL. D., Chicago, Ill.,

Digitized by Google

December 21: "I was very much pleased with the excellent make-up of your journal. It is a credit to your enterprise, and the western physicians ought to support it generously."

P. A. Sundbury, M. D., Holdrege, Neb., December 21: "Without hesitancy I think I can say that the REVIEW is the best and most readable journal published for the money. I hope that the REVIEW will continue to make its regular visits to my desk every month."

T. P. Livingston, Plattsmouth, Neb., December 22: "With pleasure I enclose P. O. order to pay for subscription. I like the REVIEW and trust it will live long and prosper."

A. F. Jonas, M. D., Omaha, Neb., January 4: "The REVIEW has become one of the best, if not the best, medical paper west of Chicago. Keep on in the good work, you are headed in the right direction."

A. E. Schofield, Tilden, Neb., January 12, 1897: "Your journal is valuable. The profession of Nebraska need just such a publication. I trust that it may be kept up to its present high standard and that it may not be ephemeral."

Notes and News.

DR. S. A. WRIGHT has removed from Pawnee City, Neb., to Berne, Kan.

DR. ALLEN F. MILLER has removed from Randolph, Neb., to Wolsey, S. D.

THE Louisiana State Board of Health has offered to supply antitoxin free to the poor suffering from diphtheria.

DR. C. B. FALL, of Beatrice, has been appointed superintendent of the Institute for the Feeble Minded, in place of Dr. J. T. Armstrong.

DR. H. H. TOWNSHEND, a graduate of the Creighton Medical College, Omaha, 1896, has removed from Ogden, Utah, to Melrose, Mont.

NORTH CAROLINA has only one medical college in her borders, and that one not very flourishing. Happy North Carolina! Nebraska, with just half the population, has three.

PROFESSORS N. SENN, of Chicago, and W. J. Galbraith, of Omaha, are spending their holiday vacation bird-shooting in Texas. It may be fun for the boys, but hard on the birds.—Columbus Medical Journal.

THE December number of the Denver Medical Times devotes nearly five pages to roasting Dr. Love and the Medical Mirror, and to prove that the free coinage of silver would be a panacea for all our hard times.

IT is announced that Pfeiffer, of Germany, has succeeded in elaborating an efficacious and reliable antitoxin for typhoid fever. A report on the mode of preparation and of a series of experiments will soon be published.

THE American Medico-Surgical Bulletin, which first started as a monthly, then grew into a semi-monthly, and finally into a weekly, was changed at the beginning of this month back into a semi-monthly publication, with Dr. R. G. Eccles, of Brooklyn, as editor.

THE annual birth rate in the United States was 30.95 per thousand in 1880. In 1890 it was reduced to 26.68 per thousand.—Atlanta Medical and Surgical Journal. What is the matter with the new woman anyway?—Denver Medical Times. Nothing. It's the old man.

FIVE trained nurses from Canada, who have for some time been employed at a sanitarium in New York state, have been ordered to return to Canada, as it is claimed they were engaged for the work and brought to this country contrary to law. This seems stretching the point quite decidedly.

THE Antikamnia Company with their usual enterprise has issued and presented to the medical profession a calendar for 1897 that is unique and exquisite. It is adorned with six original water-color "skeleton" sketches, by the artist physician of St. Louis, Dr. Louis Crusius, of the Fortnightly editorial staff.

MR. GEORGE S. DAVIS, of the well-known firm of Parke, Davis & Co., has withdrawn from that corporation. Mr. Davis has had nominal charge of the several publications issued by that firm, but under his name. No change will be made in the firm or in his publications by the withdrawal of Mr. Davis.

AS A New Year's gift the Queen of England presented Sir Joseph Lister with the peerage of the realm. This is the first instance, we believe, in which a medical man, as such, has been elevated to the position of a member of the House of Lords. It is an honor richly deserved, and will be appreciated by the medical profession.

IT is proposed to amend the by-laws of the British Medical Association so that Americans may take part in the meeting at Montreal next summer. As it is quite probable that more American than Canadian physicians will attend the meeting, it would look as though this action would be almost necessary to make the meetings a success.

THE annual dues of the British Medical Association are one guinea, about $5.25, which entitles the members to the British Medical Journal free. Great preparations are being made in Canada, especially in Montreal, for the meeting there this year. The meetings will be held in McGill University and the adjoining theological buildings.

COMMITTEES representing the different schools of practice have been in consultation during the last month in reference to medical legislation. We understand that a bill has been practically agreed upon for introduction before the legislature which calls for three examining boards, and to grant certificates hereafter only on examination.

Digitized by Google

PROF. WM. H. PANCOAST, M. D., the distinguished surgeon, of Philadelphia, died January 5, aged sixty-one. He was president of the Medico-Chirurgical College at the time of his death.

DR. A. E. ROBINSON, of Mason City, was married to Miss Belle Spencer December 31. Miss Spencer was assistant principal of schools of Mason City, and a beautiful and accomplished young lady. Dr. Robinson is a graduate of Rush College, of the year of 1893. The WESTERN MEDICAL REVIEW wishes the young couple a happy and prosperous future.

CHARLES WYNLANDER, twenty-six years of age, a medical student of Bellevue Medical College, formerly of Rush Medical College, of Chicago, committed suicide on December 14. It is said too close application to his studies affected his brain. He had gone to New York from Mt. Carmel, Ill., to finish his studies, taking with him his young wife, to whom he had been married about eight months.

THE first number of the American Medical Journalist is before us. It is a unique publication, published in the interest of the medical press of the country, and is deserving of success. Chas. Wood Fassett, St. Joseph, Mo., is the instigator of the enterprise. From the nature of the journal, it will have no exchange or free list, except to advertisers. One dollar for a year of ten months will get it.

THE hospitals of London are all, or nearly all, badly in debt, and for years various methods have been proposed to get money to remove this indebtedness. Now, the British Medical Journal says, the lord mayor-elect proposes to commemorate the sixtieth anniversary of Queen Victoria's reign by raising a national subscription to free the hospitals from this debt. It will require between four and five million dollars to do this, but the probability is that it will be raised.

THE Pennsylvania State Board of Medical Examiners is evidently doing its share in elevating the standard of the medical profession. At its meeting in December thirty-eight per cent. of the applicants were rejected. The board has heretofore given notice that it is the intention to broaden the examination in all departments of medical science, until none but well qualified men need expect to pass its examination. Meanwhile, what is Nebraska, and other states similarly situated, going to do about it? Continue to be the dumping ground of the thirty-eight per cent. class?

THE physicians of Iowa are evidently beginning to realize that they too must improve their medical practice laws in order to keep up with the continual advance that is being made in a large majority of the states. A meeting of all legal physicians of the state, without regard to school, has been called for January the 14th, at Des Moines, Ia., for the discussion and adoption of a suitable bill to be presented to the coming legislature. The Iowa Medical Journal for December prints a bill that is proposed for adoption at this meeting. The most important part of the bill is the section that provides "that from and after January 1, 1899, all persons beginning the practice of medicine in the state of Iowa must submit to an examination * * * and, in addition, they shall present diplomas from medical colleges recognized as in good standing by the state board of medical examiners, and shall present evidence of having attended four full courses of study of not less than twenty-six weeks each, no two of which shall have been given in any one year." It also provides that the state board of medical examiners, from and after January 1, 1899, "shall hold annual sessions for the examination of candidates for certificates at all those places in Iowa where medical schools that are in good standing with the board are located, at such times as the deans of the respective medical schools shall designate. They shall examine all candidates recommended by the faculties of such medical schools and shall grant certificates to all those passing satisfactory examinations. To those passing such examinations the medical colleges shall grant diplomas, and in no other manner shall diplomas be issued by any medical college in the state of Iowa."

THE DIFFERENCE DEFINED.

"I can't conceive," she archly cried,
"Wherein you men can longer pride
Yourselves from female rivals free,
For surely we have grown to be
Your peers in ev'ry human stride.
It is a truth that none dare hide;
Yet why you men will not agree
To recognize the new degree,
I can't conceive.

"Now, entre nous, won't you confide,
And tell me true, all jokes aside,
What difference the world can see
Between your manly self and me?"
"To tell you truly," he replied,
"I can't conceive."

—The Bauble.

THE president of the republic of Brazil is a physician of note and president of the Bahia Medical College.

MANY a man complains that he cannot get along because he has no "pull," but the real reason is because he has no push.

IN operating for hemorrhoids by clamp and cautery, be sure you clamp the tissue in radiating folds, so that the eschars shall be to the anal center as the spokes of a wheel to the hub. Subsequent stricture is thus avoided. Do not include too much tissue, for the cautery often burns deeper than one might expect. Only the pile-bearing mucous membrane should be burned; if it is desired to remove the external or skin piles, it may be done by ligation, previously incising through the skin to avoid the pain of the constricting ligature.—International Journal of Surgery.

Digitized by Google

MALTHUS REDIVIVUS.

That eminently cultured and good man, the Englishman Malthus, has for nearly a century been the subject of ribald abuse and unreasoning misrepresentation. Early in this century some critical ass, who probably never read the book he was commissioned to write about, while reviewing Malthus' remarkable essay on "The Principle of Population," which appeared in 1798, unjustly ascribed to the author the utterance of immoral and inhuman theories respecting the necessity of reducing the redundancy of population in the interest of the fittest. Without inquiry, the average critic descendants of the aforesaid tergivisating ass have pursued the same devious method when writing of Malthus, and so the mass of readers of to-day believe this pure man; this stolid and genuine priest; this accomplished, modest scholar, who during the last thirty years of his life acceptably taught political economy in an East Indian orthodox college; this candid man, to whose essay aforesaid Darwin distinctly acknowledged his indebtedness in the formulation of his doctrine of natural selection; this dispassionate publicist, to whose teaching concededly is due England's wise poor-law reform of 1834; this man who was so self-centered that he bore with equanimity

"The spurns
That patient merit of the unworthy takes."

"reviling not again;" this man, in fine, who so loved humanity that he found his highest enjoyment in any labor that "would do man ease and himself grace;" him it was whom these hypercritics have made the mass of readers believe to have been the spawn of Satan, the deliberate advocate of the doctrine that the way to keep the world's population and the means of subsistence in a state of equipoise was the stern restriction of marriages, the encouragement of sexual vice, and the systematic slaughter of intra or extra-uterine innocents, illegitimate or other.

The fact is that Malthus taught no such barbarous doctrines, either directly or by implication. Reasoning from the standpoint that the world's annual supply of food in his day—1766-1834—and after, and the yearly increase in population were very unevenly balanced, Malthus proposed as remedies: improved and extended agricultural methods, emigration of surplus civic populations to new countries, and above all, moral self-restraint. His essay made him famous. His noble statement of the ethics of man's relation to God, to the state, and to humanity was summed up in this homely aphorism—"Do not marry until you have fair prospect of supporting a family," and included in this idea of support was that of the proper education of offspring.

Within the past few months I saw in a paper of the day a savage article headed something like this: "A scandalous revival of the brutal theories of Malthus." My gorge rose at the foregoing headline, hence this protest against the desecration of the name and fame of the "dead and sceptered" scientist. On reading the item aforesaid I found that the writer was ignorantly belaboring Malthus over the shoulders of a California medical man and an equally unregenerate clergyman of the same state. These worthies had publicly proposed the passage of laws reinaugurating the grewsome custom among barbaric peoples of killing off, with neatness and dispatch, the hopelessly sick, the aged, and the physically degenerate as soon as their disability as fighters in life's battle became apparent. These two Golden Gate Christians—California Christianity seems to be sui generis—go quite as far as did their savage antetypes. They argue particularly in favor of the summary execution of idiots, of the incurable insane, and the congenitally deformed. Their argument is from an economic standpoint and declares, in terms, that it is an act of mercy for the physician to hasten the coming of the inevitable when in charge of persons afflicted with apparently incurable malignant disease. But that argument does not recognize the fact that these poor creatures are not themselves responsible for having been born. The act of birth so far as they are concerned was involuntary, and, therefore, not punitory. If their coming into the world was a crime, would it not have been more just to have demanded the punishment of the authors of these human parodies, and not that of the innocent, incurious parodies themselves? Respecting the monstrous proposition to constitute the physician a judge and executioner in the case of those afflicted with seemingly incurable malignant disease, their specious argument ignores the fact that in actual practice the finite mind, however well trained, sometimes makes mistakes in prognosis, and that many of the persons whose lives they would abridge in order to cure their pain, under judicious care, possibly might recover. I wonder if that California gospel expounder has eliminated the seventh commandment from his theology? These California worthies (?) have succeeded in achieving a little cheap (and nasty) notoriety by their inhuman utterances, but they have made no converts so far as I am advised. At the same time, singular as it may seem, they have escaped general criticism, probably because the critics have been absorbingly interested in the most heated, the most momentous presidential canvass since fateful 1860.

The aforesaid advocates of "man's inhumanity to man," though so illogical, so forgetful of the unerring laws of heredity, so unmindful of the relation between cause and effect, so heroic in their treatment of involuntary degeneracy, have at least placed emphasis upon the humane teachings of hygienists, who, unlike yonder perverts, would cure many of the ills complained of in a different and honester way. As they are among us, obedient to a law superior to their own volition, hygienists accept the situation and seek scientifically to mitigate the woes of these involuntary degenerates, whom yonder would-be funeral directors—clerical and medical—menace with knife and

Digitized by Google

drug; and at the same time they aim to minimize the output by restrictive reformation of the begetters.

"To this complexion we must come at last," and in the near generation, I think, will be incorporated into state statutes such rules as will rigidly inhibit marriages among the hopelessly deformed, the mentally and constitutionally diseased. And then, too, will come into our penal laws the esexualization of all felons convicted of crimes ascribable to moral obliquities, hereditary or acquired.—"Soliped," in Iowa Health Bulletin for November.

Miscellaneous.

FAITH-CURE FANATICS STRUGGLING WITH DIPHTHERIA.—The New York Medical Record of December 26 is authority for the statement that an epidemic of diphtheria is prevailing in Hopeton, Oklahoma, and it is reported that the faith-cure people, who compose a majority of the community, persist, in spite of quarantine orders, in holding public meetings at the houses where the disease exists, and physicians sent out by the authorities have been compelled to use force in order to examine the sick. In one instance a twelve-year-old boy was carried through the worst stage by a physician and volunteer nurse and was apparently on his way to recovery, but when the physician left to attend to others the father refused to give the medicine or follow any of the instructions, and the boy died, the family and friends sitting around and praying, but doing nothing to relieve his suffering. Six or eight others have been allowed to die in the same way.

HOW TO WRITE A MEDICAL PAPER.—Dr. W. P. Northrup, of New York, makes the following excellent suggestions: "Scratch out your introduction and begin where the subject really begins. Condense the body of the paper. End the paper where the subject ends. Successful papers, almost without exception, are those written with one definite and predominating thought, on which every fact is brought to bear and toward which every argument is directed. Conclusions alone are, as a rule, sufficient, with pertinent facts so marshaled as to give them proper support. The various minute details of the stages by which these conclusions are reached are usually uninteresting, and had better be touched on lightly or omitted entirely. An expert editor, by remorselessly stripping away the padding, is usually able to make an abstract that will present all the author's ideas and conclusions in one-fourth the space of the original paper. Many a man who has had something of real value to say has first smothered the life out of it with padding, and then dug a grave and buried it in the midst of a five-column paper compiled from some text-book. It would be far better for professional literature if every man would content himself with writing what he really knows, instead of writing what he has only read. One new fact discovered, one new, live, practical idea, is a sufficient subject for one paper, though it may be a short one. Two or three subjects for a single paper will render it weak or actually inert. A shotgun is adapted to small game, but large game is only brought down with a rifle. A single paper on a live subject, if it hits the mark squarely, will do more to establish a man's reputation than ten diluted and watery compilations."

GUAIACOL AND CREOSOTE IN PULMONARY PHTHISIS.—From want of perseverance in the use of this valuable remedy and on account of its nauseous taste and odor and a disbelief in its efficacy, a good many physicians have discarded the drug as useless. In nearly all cases in which I prescribed guaiacol I found the patients derived great benefits from its use. I well remember a case that I treated in 1892. The patient, a mechanical engineer, aged forty-five years, in addition to the lung trouble, was also suffering from chronic Bright's disease and passing a large quantity of albumin. As the lung mischief improved the albumin diminished very considerably, and this has led me to think that guaiacol must have some specific action on the kidneys, and if not, a cure must at least be beneficial in albuminuria. On reference to a pamphlet by Dr. Seifert and Dr. Hoelscher, I find the following quotations: "After its absorption free guaiacol is found in the urine in the space of half an hour. Besides normal albumin the blood of a consumptive patient contains other albuminoids, due to the morbid processes, and particularly products of the nutrition of the bacilli. The latter substances are very apt to produce chemical phenomena or to modify them and so become toxic. As long as such toxic albuminoids are found in the blood all the guaiacol absorbed is fixed, not upon the normal albumin, which is little apt to react, but upon these toxic albumins, which form stable combinations with it. These combinations of coagulable albumins with guaiacol are no longer of a toxic nature and they are profoundly modified by absorbing oxygen; the guaiacol and sulphur of the albumin molecule are separated from the combination and form, by oxidation, a sulphate of guaiacol, whilst the remainder of the albumin molecule is destroyed. The products thus set at liberty are eliminated from the blood, chiefly by the urine." Guaiacol can be very easily dispensed as follows: Mix twelve minims of guaiacol and half an ounce of glycerine; then add two drachms of compound tincture of gentian, two drachms of spirit of chloroform, and water to eight ounces. This is a palatable mixture.—Y. M. Jones-Humphreys, in London Lancet, December 19.

THE PASSING OF THE PHYSICIAN.—It needs no prophetic eye to see the extinction awaiting the practicing physician, using the term in contradistinction to the hospital or dispensary physician.

Digitized by Google

Surgeons, aside from the professors and hospital and dispensary surgeons, are already extinct. The drag-nets of ambulance, dispensary, clinic and hospital, have secured such a "corner" in surgery that no man outside the chosen few can make a living.

What has occurred in surgery is now occurring in medicine. No patient able to walk or ride in a cab need pay a cent for medicine or treatment. If slightly hesitating on the brink, the maelstrom of dispensary, clinic, or hospital will suck him into its hungry and capacious maw, from which nothing is ever vomited back but statistics. If too sick to walk or ride in a cab, an ambulance waits to carry him tenderly, and without shock or exposure, to sumptuous hospital apartments, built possibly by misused funds donated to the hospital for charity. Ambulating and portable sick people being thus provided for, there remains only a small class of the desperately sick whose removal might mean death. To provide for these cases it is only necessary to slightly enlarge the staff of out-door visiting physicians already attached to our dispensaries and hospitals, and presto! the thing is done. And the weary and struggling outside general practioner can go home, shut himself up with his emaciated wife and starving children, and turn on the unlighted gas.

These words were not written in jest, but embody the sober thoughts of one who has for twenty years watched the growth, abuse, and degradation of medical charity, hand in hand with which have increased the hardships of the general profession. The remedy? None is available. Experience has repeatedly shown us that unanimous and persistent action on the part of doctors is impossible. Let a board of governors of any hospital or dispensary dismiss its attending staff because of a meek and proper assertion of rights, and however flagrant and arbitrary the action, other doctors will fall over each other in their haste to thrust their necks into the apparently welcome yoke.

The average doctor is servile and shortsighted to an extraordinary degree, bent not only upon his own destruction, but also upon endangering the entire fabric of a noble and benevolent profession. Even plumbers and members of other trade-unions protect themselves by curtailing apprenticeship and by keeping out ignorant cutthroats. Why shouldn't doctors? But it is too late! Even now, as we near the vortex of muddy competition, and as we are about to go down for the last time, we must acknowledge a bitter justice in our fate; for years of neutrality and final servility have taught pompous laymen, who pose as public benefactors and philanthropists, that doctors will stand any amount of robbery and degradation to secure and keep a hospital or dispensary position.—Editorial Medical News.

MILK diet will diminish the danger of puerperal eclampsia in albuminuria of pregnancy and deficient elimination.

THE ANTISEPTIC TREATMENT OF DIPHTHERIA.—Dr. Dowling Benjamin, of Camden, N. J., in the Journal of the American Medical Association, gives the following as his treatment of diphtheria. Other writers indorse his method as being remarkably successful. After an exhaustive résumé of the other methods of treatment, including that of antitoxin, he gives the following as his method:

"The symptoms are usually not very pronounced before the diphtheritic 'patches' are visible. I make the bacteriologic or culture test in all cases when possible. From the foregoing statements it may be seen that I hold that this disease is essentially local and external; for anything on the mucous membrane practically is not in the system, but the products of the bacillus being absorbed into the system as fast as produced, cause the general and constitutional symptoms.

"Basing our treatment upon the views above stated, I have for over fifteen years held that the rational procedure in combating this disease was simply to destroy the bacilli where they are located on the mucous membrane of the throat, or elsewhere, by the proper applications of antiseptics or germicides, and secondly, meeting the poison in the blood by such therapeutic means as physiologically and chemically were the best antidotes for it.

"Now, while many scientific and learned physicians have followed these lines in treating diphtheria, they have so frequently been disappointed in their results and struggled along with a high mortality (in many cases thirty to forty per cent), yet I have always contended that this is the correct line of treatment, and will give the best results if accurately and thoroughly carried out.

"The important consideration, therefore, is what local and general medication to use, and equally important, the method of applying and using these remedies; for I believe that the failure to cure by this practice will be due either to a want of proper applications of the treatment, or to the fact that it has been commenced too late in the disease.

"If you will refresh your knowledge of anatomy by examining the drawings of the interior of the nose, pharynx, and larynx, you will conclude that no treatment applied by the ordinary swab or probang could by any possibility reach the disease at its most dangerous points, and consequently must be very inefficient in nasal and laryngeal cases. Even the physician could not apply the treatment thoroughly in an adult, and the idea of applying it in a struggling child is preposterous. Moreover, since the treatment has to be applied every hour at least, it must be left to the family to be carried out. It is, therefore, utterly impracticable, and I have found where it has been tried it did not accomplish the results. There would be a considerable mortality.

"Antiseptics applied by the nasal douche, after Thudicum's method, do reach the nasal cavity thoroughly, but it is so difficult to accomplish that

Digitized by Google

it cannot be employed with children in private practice to any great extent, even if the physician superintends its use.

"Gargles are of little or no use in the nasal and laryngeal cases.

"The spray or atomizer therefore remains the only feasible method of applying antiseptics to all parts of the affected mucous membrane. To the recognition of this fact and its early and thorough adoption, together with an efficient and pleasant antiseptic remedy to be used in the atomizer, I must attribute largely my success in the treatment of this disease.

"I acknowledge that it is with the profoundest diffidence and respect for the criticisms of my medical brethren that I advance the following statement:

"For over ten years, including 100 cases, I have not had a death from diphtheria, unless a case that died about twelve years ago be included; connected with this were three other physicians, and I have never been convinced that it was not a case of membranous croup. A white membrane was very distinct in the pharynx, extending downward. I early practiced the antiseptic treatment and would not be justified in experimenting with other things, unless my results change, but I never use the bichlorid of mercury, nor do I think it should be used in this disease; because its action, though beneficial, is almost wholly due to its local effect upon the bacilli in the throat. Many cases, especially in young children, have been injured by the too free use of this substance. Other antiseptics, such as carbolic acid, salicylic acid, sesquichlorid of iron, are equally efficacious, and may be used in ample quantity without the same amount of danger to the person.

"Since we usually depend on the laity, any treatment that can be properly and thoroughly applied, even to young children, must have vast advantages over any other. In severe cases I have all the mucous membrane thoroughly sprayed through the nose and mouth at intervals of fifteen or twenty minutes, or even longer, about fifteen seconds at a time, the child breathing as naturally as possible during the application. The spray comes in contact with every part. The membranes and symptoms rapidly disappear. On several occasions I have suspended local treatment after their disappearance; and in twenty-four or forty-eight hours the membrane would again spread over the throat, a few bacilli having been left alive, disappearing again promptly on resuming the local treatment, thus demonstrating its efficacy. It is necessary to see that the atomizer works properly and that the attendant applies it thoroughly.

"Professor Loeffler claims that the disease being entirely due to germs lying in the throat, consequently in a position where they could be reached by local antiseptics, could be readily cured by local application, and instances seventy-one cases of diphtheria treated exclusively by local antiseptic applications, without a single death, in his private practice. This statement was entirely consonant with my experience and practice, instituted ten years before his great discovery of the germ.

"If it be true (and I do not think that it can be successfully disputed now) that diphtheria is due to the presence of germs in the pharynx, why would not germicides destroy them? For we know that we possess a number of antiseptic or germicidal medicines that are invariably fatal to germs and can be used in quantities sufficient for that purpose without any detriment to the patient. Holding the view of the disease that I have advanced, I could never understand why a local treatment would not be all that was required.

"Professor Loeffler, after various experiments, suggested a combination of:

Menthol cryst.	10 gm.
Toluol, q. s. ad. fac. . .	36 cc.
Alcohol absolute . . .	60 cc.
Liquor ferri sesquichloridi .	4 cc.

"I have found the formula of Professor Loeffler to be disagreeable to the patient, while the one I use has not that objection and is quite as efficient:

Acid. acet. dilut. . . .	f ʒ ij.
Pot. chlorat.	ʒ ss.
Acid. carbol. . . .	gtt. v.
Tinct. ferri chloridi . . .	gtt. v.
Pulv. alumen	gr. v.
Acid salicylic . . .	gr. j.
Glycerin	f ʒ ss.
Aqua ros.	f ℥ ss.
Aqua q. s. ad.	f ℥ iv.

Misce. Sig.—Use as directed.

"It is a clear, permanent liquid of a purple color.

"In making application to the throat of diphtheritic patients the doctor or nurse may use a disc of glass held between his face and the patient, to prevent infection from the sudden coughing and spitting of the patient.

"I always give tincture ferri chloridi in large and frequent doses, and I believe it produces favorable conditions of the blood, as it does in many other cases of septicemia, notably erysipelas, which often disappears under this treatment alone.

"One of the benefits derived from this remedy is its local action while being swallowed.

"Result under the local antiseptic treatment: Benjamin, 100 cases, 100 recoveries; Loeffler, 71 cases, 71 recoveries.

"I will not weary you with a repetition of illustrative cases. I hope the profession will give this treatment a fair trial and report on it."

"DOCTOR, what do you think is the matter with my boy?" "Why, it is only a corrustificated exegesis anti-spasmodically emanating from the source of the animal refrigerator, producing a prolific source of irritability in the pericranium, blunting his mental profundity." "That's about what I told Betsy, but she 'lowed it was wurrums."—N. A. Medical Review.

Digitized by Google

TWO Dartmouth College students were lately fined $2,000 and $1,500, respectively, for grave-robbing.

CURE FOR CHILBLAINS.—Apply oil of eucalyptus, painting it on with a camel's hair brush. It relieves the pain and effects a cure in a very short time.

EMETICS.—Syrup of ipecac should be discarded as slow and uncertain. The wine made from the fluid extract can be depended upon. Antimony as an emetic should be banished from infantile therapeutics.—Pediatrics.

THE OLD DAYS AND THE NEW.—In the year of our Lord, A. D. 1870. Scene, surgical ward.

Surgeon—"How is Jones doing?"

House Surgeon—"Extremely well, sir; the wound is suppurating nicely."

Surgeon—"That's all right."

In the year of our Lord, A. D. 1894. Scene, same surgical ward.

Surgeon—"How is that amputation of the breast?"

House Surgeon—"I'm sorry to say, sir, the wound is suppurating."

Surgeon—"What! Suppurating!! Do you say suppurating? Well, I'll be ——.—Boston Medical and Surgical Journal.

ENGLISH AS SHE IS WROTE.—The following unique epistle is too good to be lost, and so we give it "as she was rote." The clinical description is elegant and expressive and we are sure the doctor was able to tell his patient "what is it":

T———, NEB.

Dr Grothan St Paul—Gentlemen Write you that my nose from the right nostril is running yelow matter some times soft and some times mattery it seems to choke me till I spit or if I can'nt spit it seems to vomot then the lungs get so cold till they sheaver it allway stays in the throat and when I work or sit down I notice that there is some thing wrong with the right lung it seem like a fly buse when a spider hangs her up by the strings if you want the sample on that matter I send next time write by mail or send some kind medicine to spit the matter out it seems all worst when I breath with the nose I notice right a way now answer by mail what is it.

Correspondence.

CHICAGO, ILL., December 21, 1896.

Editor Western Medical Review: At a recent meeting of the faculty of the Harvey Medical College the following resolutions were passed unanimously:

"That the licensing power to the practice of medicine in the state of Illinois to be taken from the state board of health and given to a separate board of medical examiners.

"That a diploma from a medical school of good standing shall be a necessary qualification for examination.

"That the examination shall be in the English language."

Does this look as if the faculty of the Harvey Medical College desire or intend to run a diploma mill?

Respectfully,

BYRON ROBINSON.

Society Proceedings.

THE meeting of the Western Surgical and Gynecological Association, which met at Topeka, Kan., December 28 and 29, was a success in every particular. We expected to have had a report of the meeting, but unavoidably failed in our efforts. The officers elected for the ensuing year are: President, Joseph Eastman, Indianapolis, Ind.; first vice president, D. S. Fairchild, Clinton, Ia.; second vice president, B. B. Davis, Omaha; secretary and treasurer, Herman E. Pearse, Kansas City, Mo. Executive Board—Lewis Schooler, Des Moines, Ia.; M. B. Ward, Topeka, Kan.; C. L. Hall, Kansas City, Mo.; T. J. Beatie, Kansas City, Mo.; J. P. Lord, Omaha, Neb. The next meeting is to be held at Denver, Colo., on December 28 and 29, of this year. Dr. W. W. Grant, of Denver, was made chairman of committee on arrangements.

LIST OF PRESIDENTS OF THE AMERICAN MEDICAL ASSOCIATION FROM ITS FORMATION.—Drs. Jonathan Knight, president of the convention; Nathaniel Chapman, 1847; Alexander H. Stevens, 1848; John C. Warren, 1849; Reuben D. Mussey, 1850; James Moultrie, 1851; Beverly R. Wellford, 1852; Jonathan Knight, 1853; Charles A. Pope, 1854; George B. Wood, 1855; Zina Pitcher, 1856; Paul F. Eve, 1857; Harvey Lindsley, 1858; Henry Miller, 1859; Eli Ives, 1860; Alden March, 1863; Nathan S. Davis, 1864-65; D. Humphreys Storer, 1866; Henry F. Askew, 1867; Samuel D. Gross, 1868; William O. Baldwin, 1869; George Mendenhall, 1870; Alfred Stille, 1871; D. W. Yandell, 1872; Thomas M. Logan, 1873; Joseph M. Toner, 1874; W. K. Bowling, 1875; J. Marion Sims, 1876; Henry I. Bowditch, 1877; T. G. Richardson, 1878; Theophilus Parvin, 1879; Lewis A. Sayre, 1880; John T. Hogden, 1881; J. J. Woodward, 1882; John L. Atlee, 1883; Austin Flint, 1884; Henry F. Campbell, 1885; William Brodie, 1886; E. H. Gregory, 1887; A. Y. P. Garnett, 1888; W. W. Dawson, 1889; E. M. Moore, 1890; Wm. T. Briggs, 1891; Henry O. Marcy, 1892; Hunter McGuire, 1893; James F. Hibberd, 1894; Donald Maclean, 1895; R. Beverly Cole, 1896; Nicholas Senn, 1897.

OMAHA MEDICAL SOCIETY.

The regular semi-monthly meeting was held Tuesday, December 22, President Dr. A. F. Jonas in the chair

Dr. F. E. Coulter read a paper entitled "What Shall We Do with Our Criminal Class?" (See page —.)

Dr Milroy opened the discussion by commend-

Digitized by Google

ing the paper and enlarging upon it. The question was a large one as well as an old one, one which had always engaged society. The prevention of crime is the great thing to be accomplished. Alcohol being so large a factor in the cause of crime, we should seek to limit its consumption by educating our children.

Dr. Swartzlander indorsed the paper and was pleased with its estimates and suggestions.

Dr. R. C. Moore said that it was one which has occupied the minds of the wisest, most philanthropic, and best men for all ages. The cause should be removed. If we killed gnats we would not have any lice. Alcohol and the saloon are the breeders of vice and crime. Do away with the saloon and we would much lessen crime. Iowa's jails began to be empty when prohibition went into effect. National legislators should very much restrict emigration and limit the number of those who make up the saloon class. If we could control this we would largely control the saloon and limit crime. The criminal is usually a pervert and he cannot be reformed. The law's penalties should be swift, sure, and terrible, without technical delays.

Dr. Lord said that the paper was a valuable contribution to the subject and the medical profession was to be the source of its solution. He had been much impressed with the views advanced by Dr. Daniels, of Texas, who read a paper before the American Medical Association, and was recently published in the society's Journal.

Dr. Daniels maintains that so large a share of criminals are physically diseased or degenerate that their cases should be submitted to men capable of passing upon their cases, men who could make a diagnosis of their condition, and upon this basis recommend suitable punishment or treatment, as the case might be. Our penal system has shown itself wholly inadequate and is a vicious system, as results show, it being based more upon revenge than a desire to help or benefit the vicious classes. We should in some effective way seek to prevent the propagation of the classes who overrun our jails, poor-houses, penitentiaries, state and charitable institutions, and heap ever increasing burdens upon the taxpayers. The expense incident to police surveillance, apprehension, detention, prosecution, and conviction, of our criminals is becoming more and more a question of such magnitude that the body politic will soon demand relief and a change. The legal profession and the laity, however, will be slow to delegate this authority to us, for they yet see through a glass darkly and are disposed to discredit us and our expert opinions.

Dr. B. B. Davis believed as the former speaker, that criminals should be classified. We should also distinguish between the curable and incurable, just as we do with the insane. The penitentiary is a poor place for curable criminals. The regular army, with its strict discipline, might be a good place for the perpetrators of the smaller crimes.

Dr. Gifford said why not follow out the question of the curable and incurable. We work on that plan in treating the insane. He always thought it illogical to continue to convict and re-convict our criminals.

Dr. Coulter, in closing, thanked the members for their kind reception of the paper. The medical men were the ones to take up this question, for they were the only class who at all understood this subject. Little could be expected of the legal profession and the laity. Until we were united as a profession and demanded recognition as an authority little headway would be made.

The society then went into executive session.

ELKHORN VALLEY MEDICAL SOCIETY.

(Reported by the Secretary, Dr. F. A. Long.)

MADISON, NEB., January 2, 1897.

Editor Western Medical Review: In response to a call previously issued upward of twenty representative physicians met at the Hotel Oxnard, Norfolk, Neb., December 29 last, for the purpose of organizing a district medical society.

Dr. Alexander Bear called the meeting to order, and, in the dual capacity of mayor of Norfolk and medical nestor of the Elkhorn valley, delivered the address of welcome.

A constitution and by-laws, modeled after that of the state society, were adopted. The society was named the Elkhorn Valley Medical Society, its territory to be unlimited. Norfolk was decided upon as the permanent place of meeting; meetings to be held quarterly, about the first of January, April, July, and October, respectively, dates to be determined by the executive officers. The following officers were elected:

Dr. Alexander Bear, Norfolk, president; Dr. J. M. Alden, Pierce, first vice president; Dr. P. H. Salter, Norfolk, second vice president; Dr. F. A. Long, Madison, secretary; Dr. G. B. Richards, Norfolk, treasurer.

Dr. Charles Inches, of Scribner was expected to read a paper on the subject of typhoid fever and its treatment. After a letter from Dr. Inches had been read explaining his unavoidable absence from the meeting and wishing the society success in its organized capacity, Dr. E. W. Minton, of Oakdale, was called upon by the president of the society, who responded in an introductory talk upon the subject of typhoid fever and its treatment, substantially as follows:

TYPHOID FEVER AND ITS TREATMENT.

We are all familiar with the chemical aspect of typhoid fever. We are made familiar with its clinical features by its frequent recurrence to us in our capacity as physicians, in our individual experiences. We are acquainted with the fact that it is classified as an endemic infectious fever. Scarcely a season passes but we have this disease

Digitized by Google

to treat in our several localities as general practitioners. A disease lasting usually three or four weeks, characterized by constant lesions of the agminate and solitary glands of the intestine, with enlargement of the spleen and mesenteric glands; active or gradual, and frequently insidious in its invasion. The early symptoms may consist of simply headache, gastric derangement, and a slight elevation of temperature. When we have these three symptoms, not accounted for by other phenomena, that will explain them, we are in a position to render a probable diagnosis of typhoid fever, and as physicians should be on the alert to grasp the situation; for it is often the case that an early diagnosis of this disease has much to do with its subsequent course and termination. I always feel, in treating a case of typhoid fever, that I am dealing with an insidious and treacherous foe to the welfare of my patient—a foe capable of converting hope and bright anticipation of recovery into one of anxiety and hopelessness. In many cases we have additional symptoms to aid us in establishing our diagnosis. Slight rigors or chilly sensations, pain in abdomen, diarrhea, epistaxis. I am of the opinion that an early diagnosis and early recumbency are very important; for I have observed that those cases that resist the increasing lassitude and endeavor to keep up and fight off the disease are apt to be bad cases to manage. This is especially true when, under the impression that the trouble is biliousness, the patient, on his own suggestion, resorts to physic of a drastic character. Such cases are invariably made worse and more complicated to treat.

We are all familiar with the fully developed picture of typhoid fever. From headache, we advance to delirium and stupor as the disease progresses; the febrile movement of certain nearly constant characteristics; the furred, red, dry tongue, becoming brown, and often fissured; the prostration, slight at first, becoming progressively more marked and extreme; the abdominal tympanitis; the gurgling in the right iliac fossa; the diarrhea of ochery yellow stools; the eruption of the rose-colored spots, coming out upon the surface of the body about the seventh and eighth days, lasting two or three days, and reappearing in successive crops. We are familiar with the intestinal hemorrhages and the many complications which make up in our minds the complete and fully developed picture of typhoid fever. The causation of this disease is believed by the profession, and is taught by our most advanced investigators, to be attributable to a living micro-organism, that, when introduced into the body under favorable conditions, is capable of indefinitely reproducing itself; that every case of typhoid fever is derived from a previous case of that disease; that the poison is eliminated with the fecal discharges; and that this poison thus eliminated is not capable of at once producing the disease in another person, but requires a certain period of time to mature and intensify its poisonous action and properties. How important it is, then, to thoroughly disinfect the excreta of all typhoid cases by chemical agents, by fire, or otherwise. We do not do our whole duty as physicians to the friends of our patients and to humanity unless we enforce, as far as we can, this sanitary measure. The poison of typhoid fever is capable of reproducing itself and continuing its existence outside of the living body. The conditions favorable to its production are, decaying animal matter and moisture, especially fecal discharges. It is capable of remaining suspended in water, and finds its entrace to the human body, usually, by the drinking water. Suspended in the atmosphere, it may gain access to the body through the inspired air. This is probably a very infrequent method of its entrance into the body.

In the treatment of typhoid fever the principal thing is the elimination of the poison of the disease, and the control of the fever heat, within the limits of safety to our patient. For we know when we have hyperexia, we have a condition tending to rapid exhaustion of our patients, and that serious complications are apt to arise. One of the things of prime necessity is fresh air, free ventilation. By this we encourage elimination by the lungs. The drinking of plenty of pure water assists elimination by the kidneys, and its frequently repeated internal and external use is very important. The activity of the skin, maintained by frequent sponging, is refreshing, is a matter of cleanliness, and favors elimination by that great emunctory of the body. The elimination by the bowels should be maintained. There are two agents, in my experience, that seem to exert a favorable influence in the treatment of the intestinal condition, one the mild chloride of mercury, in small repeated doses, favoring intestinal elimination, and guaiacol carbonate, arresting intestinal fermentation and putrefaction.

It would appear from experimentation with guaiacol carbonate, that fermentation is necessary to decompose guaiacol carbonate, and render potent the guaiacol, its active constituent, as a germ destroyer and an agent capable of rendering the toxins of this disease in the alimentary canal innocuous. The fever heat is probably largely due to the absorption of toxins, formed in the intestine, into the blood. I believe that we may successfully limit the pernicious effect, by the judicious use of intestinal antiseptics, and that the use of guaiacol carbonate is a distinct advance in our therapy of this disease.

In the treatment of the hyperexia there is no treatment that can compare in efficiency and statistics of decreased mortality with the cold bath treatment, the Brand method. This method has its objectionable features in the case of children and in the aged patient; but where it can be scientifically and properly used, is a valuable therapeutic resource. The graduated bath is also an excellent method of heat reduction. There is one point which I consider important in the adminis-

Digitized by Google

tration of baths for the reduction of body heat, and that is pretty vigorous friction to the skin, by two or three persons, while in the bath, to keep the blood in the cooling area of the body—that is, in the skin; for we know that the action and condition of the circulation of the blood in the skin has much to do with our body temperature.

In the nursing of typhoid fever, I think it much better to have some person past thirty or forty years of age, as being less likely to contract the disease. And while we have many excellent nurses in the immediate relation of our patients, someone outside of the family and familiar with the disease is much to be preferred.

The diet of typhoid fever is worthy of our careful consideration. Milk is a precious article of diet and when peptonized usually agrees and is assimilated by our patients. There are only three perfect articles of diet, in themselves, capable of nourishing every tissue of the body. At the head of the list I would place milk, an agent capable, for a time, of supplying every element necessary to the nutrition and growth of the animal body, as illustrated in the growing young animal. As the second, I would mention eggs, capable, under favorable conditions, of producing the complete animal, as illustrated in the hatched chicken. Third, meat, the stored nutrition of the formed animal body. From these we can form our principal diet for our typhoid cases. I have found oyster broth, made from fresh oysters, a useful diet, and a change relished by the typhoid patient. In one case that I remember, a lady, pregnant about the fourth month, I was enabled by the use of raw oysters, which she seemed to relish to a remarkable degree, to carry through a prolonged sickness, with happy termination to mother and child.

Speaking of the complications of typhoid fever, one of the most alarming and distressing is perforation of the bowel. In more than twenty years' experience in the treatment of this disease, I can call to mind but one case of recovery with this complication. A German, who was usually robust and wiry, was taken with diarrhea and some slight fever, which had run on for a few days without much prostration, was suddenly taken with intense abdominal pain, and all the conditions incident to shock following an accidental injury. By the use of hypodermic injections of morphine and atropine and a large fly blister on the abdomen, we carried him along for about a week, when, by an injudicious indulgence in some solid food, he had another attack with his bowels, and had to be pretty freely supplied with morphine for a number of days. He made a complete recovery and is well and hearty to-day. There was another case of the fever in the same house, which terminated fatally.

I think I have presented some of the salient points in regard to typhoid fever and its treatment, and shall be pleased if I have succeeded in opening a discussion of this subject profitable to us all.

DISCUSSION.

Dr. Edward Tanner, Battle Creek: As Dr. Minton has very thoroughly and ably presented the subject of typhoid fever and its treatment, with the exception of the serum treatment, by inoculation, similar to the prevention of cholera by inoculation, I will mention that it appears that the experiments carried on in Professor Koch's institute in Berlin by Professors Peiffer and Krolle have quite conclusively proven that the blood of a person who has been exposed to the infection of typhoid fever can be rendered immune from that particular disease as effectually as against cholera or diphtheria, although the process differs from that employed in diphtheria. In the latter disease, the blood serum from a horse that has been rendered immune to diphtheria by repeated injection of cultures of the Klebs-Löffler bacillus of diphtheria is used; while in typhoid fever and cholera, the person is inoculated first with a small dose of sterilized culture of the germs, then, five days after, with the same dose of a living culture, and five days after that, with a larger dose of the living culture. From our present knowledge of diseases caused by micro-organisms, it seems that there is formed in the blood of a person having one of these self-limited diseases, a germicidal substance, which renders the person immune from that particular disease, by preventing the further growth of the bacilli. Through this process the disease becomes self-limited. Reasoning from analogy, it is my belief that, at no distant day, the prevention of typhoid fever by inoculation will prove as successful as it has against cholera or diphtheria.

Now, in regard to the intestinal antiseptic treatment spoken of by Dr. Minton, I do not believe that any drug introduced into the alimentary canal can be of sufficient strength to destroy the bacilli, which are buried in the mucous membrane and submucosa of the intestine, and are there multiplying in sufficient numbers to cause necrosis of the tissue, unless it be of such strength as would injure the patient. It seems to me the only benefit we derive from such remedies is in checking intestinal fermentation and preventing the formation of ptomains and toxins, which, being formed and absorbed into the blood, would increase the severity of the disease. Such remedies as thymol, guaiacol carbonate, calomel, or the mineral acids have seemed to me to answer the purpose best in preventing intestinal fermentation, by putting the intestinal ulcers in a healthy condition, thereby preventing the absorption of poisonous toxins and the micro-organisms of suppuration which abound on the surface of the intestinal ulcers.

In conclusion, I would say, under our present knowledge of the disease, the treatment should be, first, the free use of water, both internally and externally, with other eliminatives to free the system as far as possible of poisonous material already formed, and, second, the use of intestinal antiseptics, to prevent, as far as possible, the fur-

Digitized by Google

ther generation and absorption of poisons, which, if not checked, would result in a septic fever that would continue after the blood had become immune from the further development of the typhoid germs. It is my belief that in cases in which the fever does not subside after the fourteenth day, the cause is due solely to sepsis.

Dr. P. H. Salter, of Norfolk, said he was a thorough believer in the antiseptic and eliminative treatment; that while antiseptics produce a purely local effect on bowel contents, clinical observations clearly justified their use. He used small doses of calomel and magnesia sulphate as eliminatives, in the early stages, and had used a great deal of beta-naphthol for antiseptic effect on bowels. Guaiacol carbonate and salol he considered equally useful. Good nursing and the abundant administration of peptonized milk and milk foods were all-important.

Dr. A. B. Tashjean, Norfolk: I would like to call the attention of the society to that class of typhoid fever characterized by clean, raw-beef like, or brown tongue, profuse diarrhea, and high temperature, with early depression of the nervous system and vital powers. These cases, unless anticipated by early and proper treatment, are followed by typho-mania, muttering delirium, involuntary evacuation, subsultus tendinum, jactitation, drooping of the chin, glassy and partially closed eyes, tympanitis, enlargement of the abdominal viscera, perforation, profound coma, and abolition of reflexes, and thus sepsis reigns, and death closes the scene. To prevent these conditions, I would urge the early administration of sulpho-carbonate of zinc. It will control diarrhea, and prevent excessive loss of the fluids of the body, enlargement of the abdominal viscera, and typhoid maculæ; it will reduce temperature and destroy bacilli of typhoid fever while they are free in the intestinal canal, before they have imbedded themselves within the follicles. The remedy should be used continuously until typhoid tongue disappears, and normal color is restored to the oral mucosa. I have aborted many cases under this treatment within two weeks.

Dr. W. F. Conwell, Neligh: I wish to compliment Dr. Minton for the able manner in which he has presented the subject of typhoid fever. In the treatment of typhoid fever, I think the nursing and diet are very important. The nurse should be able to note the change of temperature and pulse. I am decidedly in favor of the milk diet. A mild action of the bowels should be maintained the first week. I believe we can abort the fever with the intestinal antiseptics. I continue the antiseptic treatment through the entire course of the disease.

Dr. J. M. Alden, of Pierce, said he had no faith in the abortive treatment of typhoid, and placed very little confidence in the so-called antiseptic treatment. By either method the case was by no means proven. The "Woodbridge" treatment offered nothing new, except guaiacol; eliminatives had been in use for many years. In his experience cases in which bowels were constipated, or kept in check, did as well as those that were freely purged. In an unusually severe epidemic of typhoid during the last fall, out of twenty-two cases, five died. During a recent three months' visit to the New York hospitals he learned that some of the best men there placed no confidence in any particular method of treatment; that in one of the hospitals they place a series of cases under a certain treatment and compare results, and that the results from the antiseptic treatment are no better than those treated symptomatically.

Dr. B. F. Gay, Pierce: In listening to the remarks of the gentlemen of this society who have given their views concerning the treatment of typhoid fever, I am much pleased to note the favor in which the antiseptic and eliminative treatment of the disease is held. It would seem that in this form of treatment we have at last found a method which is ideal, at least it offers greater hopes of cure and relief than any which has been offered. The ways of arriving at the results in this plan of treatment vary somewhat, the results are also varied. Although much was expected from the "Woodbridge" treatment, the results so far have not altogether come up to the highest expectations. In my experience the small and frequently repeated doses of calomel, these to be continued until the constitutional effects have become manifest, about one-twentieth grain doses; this, together with guaiacol, euthymol, or eucalyptol, has made the disease much less severe. Also the use of epsom salts, which may be continued after the beginning doses of calomel, keeps up the elimination. There is no question about the antiseptic action of the calomel, and it does no doubt remove the micro-organisms from the system, in some instances, and, in my opinion, is a proper plan of treatment in the beginning stages. The use of the sulpho-carbolate of zinc, recommended by Dr. Tashjean, in his remarks, certainly has proven highly useful in the class of cases he mentions.

In conclusion of the discussion, Dr. Minton briefly reaffirmed his belief of the method by the cold bath as superior to any other method for heat reduction; that while sponging was useful as a cooling means, refreshing to the patient, and excellent for cleanliness, it was too "short a pole to reach the persimmons" in cases of hyperexia; that as touching the "Woodbridge abortive treatment," the efficacy was largely due to the guaiacol carbonate; and that the other ingredients of the treatment had been in use for perhaps twenty years by the profession, viz., the calomel, the podophyllum, and the eucalyptol.

Letters of regret were read from a dozen medical men unable to be present.

Considerable enthusiasm prevailed, and the opinion was unanimously expressed that the Elkhorn Valley Medical Society had come to stay and would become a power in medical circles in north Nebraska.

Digitized by Google

Board of Health Proceedings.

NEBRASKA STATE BOARD OF HEALTH.
MEMBERS—Dr. C. F. Stewart, Auburn, President; Dr. B. F. Crummer, Omaha, Vice President; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.

AT the meeting of the board December 17 the following were granted certificates:

Frank E. Liliendahl (R.), Omaha,
Omaha Medical College, 1896.

B. H. Clark (R.), Graf,
College of Physicians and Surgeons, St. Louis, 1880, and University of Missouri, 1888.

F. H. McCray (R.), South Sioux City,
Sioux City College of Medicine, Sioux City, Ia., 1896.

G. C. McMillan (R.), Fullerton,
College of Physicians and Surgeons, Keokuk, Ia., 1892.

Harry S. Finley (R.), Pawnee City,
Jefferson Medical College, Philadelphia, 1895.

The Board of Health, the legal board as recognized by the constitution, Governor Holcomb, State Superintendent of Schools Corbett, and Attorney General Churchill, met on January 6 and appointed Dr. B. F. Crummer, of Omaha, as "secretary" for the next four years, in place of Dr. J. V. Beghtol, who has been on the board since its organization.

At this meeting the board passed the following resolution:

"Whereas, Dr. J. V. Beghtol has proven to be a faithful and competent secretary of this board; and

"Whereas, The appointment of another as his successor is due to geographical reasons and in no sense to any dissatisfaction with the services of Dr. Beghtol; therefore, be it

"Resolved, That the board hereby testifies without solicitation and without reserve to their high esteem for Dr. Beghtol as a man and as a physician, and commend him to the confidence of the public everywhere."

Dr. Crummer, the newly appointed secretary, removed to Omaha in 1888 from Illinois, his native state. He graduated at the University of Michigan in 1869, and New York University, 1875. A friend and co-worker of the late Dr. John H. Rauch, the doctor is familiar with the early struggles and final triumph of medical legislation in his former home, and came to Nebraska thoroughly imbued with the ideas of advancement in the status of the profession through a higher standard of education. He was the chairman of the committee which drafted the bill which was passed by our legislature six years ago, and is still an ardent advocate of further advancement by taking the licensing power out of the hands of all colleges and delegating it to one independent board of examiners. Dr. Crummer may be called a representative of the general practitioner, is universally kind and considerate in his association with other physicians, and is in every way well qualified for the position he has been appointed to fill.

At the meeting of the board January 12 Dr. C. F. Stewart, of Auburn, was elected president; Dr. B. F. Crummer, Omaha, vice president; Dr. F. D. Haldeman, Ord, secretary, and Dr. B. F. Bailey, Lincoln, treasurer. The following were granted certificates:

A. J. Wilson (R.), Omaha,
Creighton Medical College, Omaha, 1895.

Charles Hunter, South Omaha,
Barnes Medical College, St. Louis, 1896.

During the year 1896 the Nebraska State Board of Health passed upon seventy-four applicants, rejecting four.

The board will hold no meeting in February, the next meeting being March 4.

Necrology.

DR. JOHN D. HOLMES, of Des Moines, committed suicide December 12.

DR. FRANK OVERHOLT, of Des Moines, died at Harlan, Ia., December 9.

COLIN J. HACKETT, M. D., of Le Mars, Ia., died November 26, aged fifty-six.

DR. JACOB REED, one of the leading physicians of Colorado, died of pneumonia at his home, Colorado Springs, December 15.

DR. SELDUN W. JONES, of Leavenworth, Kan., died in that city last month. He was one of the oldest physicians of Kansas, having graduated from the Medical School of Maine in 1853.

DR. E. H. SMITH, of Fullerton, Neb., died December 27, in Omaha. About six months ago the doctor began to fail and took a trip to his old home in Canada, in the hope that a change might be beneficial. The hoped for benefit, however, did not come, but he gradually got worse and was brought home. After remaining home for a few days he was taken to Omaha, so that he might receive medical care there. His death was caused by Bright's disease. He was buried in Fullerton on the 29th of December, the Masons having charge of the funeral services. The deceased was thirty-eight years of age last March. He was born in Montreal, Canada, and graduated from the McGill Medical College of that city in 1881. After graduation he came west and located in Kansas City, where he remained but a few months, when he removed to Fullerton, where he has resided for the last fifteen years. He married Miss Mary E. Strawn, sister to Judge W. S. Strawn, of Omaha, in March, 1885. He leaves a wife and one child, a little girl about two years of age. Dr. Smith had built up a large practice, was admired for his many good qualities, both by his professional brethren and friends and neighbors. He was kind and good to all. He was coroner of Nance county for several years. Dr. Smith has been for many years a consistent and faithful member of the Nebraska State Medical Society, and his death will be deplored by all the members of that body.

Digitized by Google

Therapeutic Notes.

THE local application once a day of a two per cent. solution of silver nitrate is recommended as a simple cure for small hemorrhoids.—Southern Clinic.

DUSTING POWDER FOR ECZEMA.—

℞ Pulv. amyli . . . . . ʒ j.
Pulv. zinci oxidi . . . . ʒ ij.
Pulv. camphoræ . . . . . ʒ j.

M. Sig.—For external use.—Hyde.

TUBERCULOSIS OF LUNGS.—

℞ Creosote (beechwood) . . }
Spirits of chloroform . . } aa ʒ ij.
Alcohol. . . . . }

Sig.—To use in inhaler.

LEUCORRHEA, following excessive lactation, or other depressing conditions, usually disappears under the following tonic:

℞ Acidi arsenosi . . . . . gr. ¼.
Ferri redacti . . . . . gr. v.
Quininæ sulph. . . . . ʒ j.

M. Ft. pil. xx. Sig.—One t. i. d.—Hare.

THE subjective symptoms of urticaria may be greatly relieved by applying the following as a lotion:

℞ Acidi carbolici . . . . . ʒ j–ij.
Acidi borici . . . . . ʒ iv.
Glycerini . . . . . ʒ j.
Alcoholis . . . . . ʒ ij.
Aquæ . . . . . ℥ xiv.

M.—Stelwagon.

VAGINAL SUPPOSITORIES.—The Journal de Médécine de Paris for September 27 gives the following formula:

℞ Acetanilide . . . . . gr. lxxv.
Tannin . . . . . gr. viii.
Extract of hyoscyamus . . gr. iv.
Sugar of milk . . . . gr. cl.

M. This is for one suppository, to be used for vaginal inflammation.

EPILEPSY.—

℞ Liquor sodii arsenitis . . . . ʒ jss.
Strych. sulph. . . . . gr. j.
Sodii brom. . . . . ʒ j.
F. ex. ergot . . . . . ʒ v.
Tr. digitalis . . . . . ʒ iij.
Aqua menth. vir. . . . . ℥ iv.

M. Sig.—A teaspoonful after each meal.—Brower.

SICK AND NERVOUS HEADACHE.—Dr. Aritman advises the following for migraine:

Diminish the hyperesthesia of the painful area by a spray of some local anesthetic, and immediately afterwards practice compression of both temporal arteries by means of rings of cork held in place by a gauze bandage. Administer the following in four doses at intervals of two hours:

℞ Antipyrin . . . . . gr. vijss.
Sparteine sulphate . . . . gr. ½.
Caffeine citrate . . . . . gr. jss.

NO REMEDY is equal to the local application of belladonna in preventing the secretion of milk in cases of inflamed mammary glands.

SOME GOOD EXPECTORANTS AND COUGH REMEDIES.—The following formulæ have been thoroughly tested by Dr. James K. Crook, of New York, in hospital and private practice, and may be trusted to render good service in properly selected cases:

1. For irritative coughs: ℞ Phenacetin, 20 to 40 grains; ext. glycyrrhizæ, 20 grains; sacch. albi, 2 drachms. Fiat pulvis, in chartulas xx. dividendus. Sig.: One to be taken at one, two, or three hour intervals.

2. When an expectorant effect is desired: ℞ Extracti glycyrrhizæ, 20 grains; phenacetin, 20 to 40 grains; ammonii muriatis, 1 to 2 drachms; sacch. albi, 2 drachms. M. et in chart. xx. div. Sig.: One powder to be taken in a little water every two, three or four hours.

3. A good stimulating expectorant for adults: ℞ Apomorph. hydrochloratis, 1 grain; syr. ipecacuanhæ, 2 fluidrachms; syr. tolutani, 1 fluidounce; aquæ dest., q. s. ad. 3 fluidounces. Ft. mist. A teaspoonful five times daily at four-hour intervals. Shake well before using. Prepare freshly as required and keep in a dark-colored bottle.

4. A good stimulating expectorant for every-day bronchial and phthisical coughs: ℞ Ammonii muriatis, 2 drachms; tincture opii camphoratæ, spiritus chloroformi, syr. ipecacuanhæ, aa 2 fluidrachms; syr. prun. Virginianæ, q. s. ad. 3 fluidounces. M. Sig.: A teaspoonful every three or four hours. Shake well before using.

5. For weak and fruitless coughs with loss of bronchial power: ℞ Ammon. carbonatis, 1 to 2 drachms; tinct. tolutani, 2 fluidrachms; syr. senegæ, spiritus vini gallici, syr. simplicis, aa 4 fluidrachms; aquæ dest., q. s. ad. 3 fluidounces. Ft. mist. Sig.: A teaspoonful in a little water every two, three, or four hours.

6. For asthmatic and emphysematous coughs: ℞ Spiritus ætheris compositi, 4 fluidrachms; potassii iodidi, ammon. muriatis, aa 2 fluidrachms; codeinæ sulphatis, 2 grains; syr. tolutani, 4 fluidrachms; aquæ dest., q. s. ad. 3 fluidounces. M. Sig.: A teaspoonful every two, three, or four hours.

7. For recurring bronchitis or winter cough: ℞ Terebene, 6 fluidrachms; ol eucalypt., 2 fluidrachms. M. Sig.: Ten to fifteen drops on a little sugar every three or four hours.—Medical Record.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL II. No. 2. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. FEBRUARY 15, 1897.

Original Articles.

REPORT OF TWENTY-THREE CASES OF PARALYSIS, COMPLICATING POTT'S DISEASE, ETC.

BY W. ROSS MARTIN, M. D.,

PROFESSOR ORTHOPEDIC SURGERY AND BACTERIOLOGY, JOHN A. CREIGHTON MEDICAL COLLEGE; ORTHOPEDIC SURGEON TO ST. JOSEPH'S HOSPITAL, OMAHA.

I trust that it will not be inferred from the title of this paper that I look upon paralysis as the most important complication of Pott's disease; on the contrary, I am fully aware that other lesions may be present and of such nature that its progress is materially influenced by them. Notwithstanding this fact, paralysis, when it occurs, so favorably influences the development of the more serious complications, as to merit almost equal consideration with them. For instance, paralysis increases the liability to abscess by increasing the tendency to jars, injury, and overfatigue, to which these unfortunate patients are constantly subjected. I have purposely refrained from considering Pott's disease as a whole, since it would be impossible in any one article outside of an extensive treatise to deal with this subject in all its bearings. According to Gibney (System Surgery, Dennis, vol. II) paralysis occurs in 15 per cent. of all cases of Pott's disease. This alone gives it a prominent place among its complications. It may appear early or late in the disease, usually late, and the degree of paralysis has no direct relation to the amount of deformity. This fact was noted by Mr. Pott in his original article and has since been abundantly proved by clinical observation. It usually develops slowly, but may come on suddenly. It is usually bilateral, but may in very rare instances be unilateral. The lower extremities are generally involved; rarely are the structures above the deformity implicated by a secondary ascending degeneration. It usually accompanies deformity, but may present without deformity. Just here it is that diagnosis is difficult and it is necessary to differentiate it from the extreme weakness that accompanies all severe cases, from infantile paralysis, from cerebral paralysis, and especially from hysterical or neurotic spine. Given a case without deformity, pain and local rigidity, with possibly a small collection of pus, decides the diagnosis. The profound asthenia offers no bar to the normal flexibility of the spine, and is a fruitful source of pastural curves; the limbs are wasted, but the reflexes are normal. The character of the paralysis is spastic paraplegia; the reflexes are increased and there is stiffness of the limbs, therefore it could not well be mistaken for anterior polio-myelitis, so common in children. This affection is sudden in onset and affects certain groups of muscles, often confined to one limb; muscles flaccid, reflexes lost, and has no symptoms of Pott's disease. Infantile cerebral paralysis is always accompanied by semi-idiocy and a glance will exclude it. In hysterical spine the pain is localized posteriorly and is apparently acute; muscular rigidity yields to gentle but firm pressure and the reflexes are absent. The attack comes on suddenly, there is exaggerated localized pain and tenderness, and there is absence of genuine muscular spasm. This muscular rigidity limits all normal motions of the spine, and at times it is due solely to involuntary muscular spasm. "It is upon this that the diagnosis must largely depend; it is ever present and nothing abolishes it except profound anesthesia, and, at times, the termination of the inflammatory process. It is the first symptom to appear and the last to disappear, and when, and only when, it is no longer present can a cure of Pott's disease be safely predicted." (Jones.) The cases forming the basis of this paper have been under my personal care and observation in hospital and private practice, and are good illustrations of Pott's disease with paralysis.

Of the twenty-three cases there were seven males and sixteen females. The disease developed at an average age of five years. Paralysis appeared at an average age of seven years. The average duration of the attack was one year. The average duration of disease when attacked was two years. The average time intervening between recovery and relapse was one year in each. The earliest period of attack was one month. The latest period of attack was four years. In one the attack followed a fall. The average duration of treatment was one year.

EXTENT OF PARALYSIS.—In eighteen the lower extremities alone were involved; upper and lower extremities in three; lower extremities and bladder in one; lower extremities and rectum in one.

CONDITION OF REFLEXES.—In all the reflexes were exaggerated, this increase ranging from the slightest amount noticeable to that in which the percussion would fully extend the leg on the thigh and flex the thigh on the pelvis, and the contractions were tetanic in character. Ankle clonus,

Digitized by Google

like the other reflexes, was present in all cases, but varied in degree. In one case the sensation was slightly affected, and in one it was completely lost below the knee on left side and impaired on right side.

CONDITION OF SPHINCTERS.—There was incontinence of urine in one. This case was cured. In one there was incontinence of feces. This patient died later of general tuberculosis.

REGION INVOLVED.—Fifth and sixth cervical in one; fifth, sixth, and seventh cervical in one; sixth and seventh cervical in two; sixth and seventh cervical, first and second dorsal, in two; fifth, sixth, and seventh cervical, first and third dorsal, in one; from the sixth cervical to the third dorsal in one; first and second dorsal in one; first, second, and third dorsal in four; second dorsal in one; second, third, and fourth dorsal in one; third and fourth dorsal in one; fifth, sixth, and seventh dorsal in three; fifth to tenth dorsal in one; sixth, seventh, and eighth dorsal in two; eighth, ninth, and tenth dorsal in one.

DEGREE OF DEFORMITY.—In five the deformity was very large. In eight the deformity was moderate in size. In eight the deformity was small in size. In one the deformity was very small. In one there was no deformity.

DEGREE OF RECOVERY.—Fourteen were cured, six greatly improved, and three slightly improved. Of the cured cases, one had two attacks; two had abscess following the paralysis, and in one abscess preceded the attack, and one died later of general tuberculosis. The cases greatly improved had traces of exaggerated reflex; of these one died later of general tuberculosis. From an individual study some of the cases reveal points of interest that are not brought out in this analysis. For instance:

CASE II.—L. H., age 8½ years, developed Pott's involving third and fourth dorsal vertebra, in August, 1890. Treatment commenced at once. It proved ineffectual and paralysis developed in May, 1891, when there was moderate degree of ankle clonus; exaggerated patellar reflex. Patient unable to stand unsupported: jacket and head spring applied. January 1, 1892, walks unsupported; May 2, 1892, walks well; reflexes normal; June 12, 1893, still wearing head spring, but is in bad condition; chin is not properly supported by it. About one month ago began to lose power in lower limbs; at present cannot stand unsupported; patellar reflex much exaggerated; sensation much impaired; apparatus reapplied and k. i. prescribed in increasing doses. November 9, 1893, discharged cured, wearing jacket and head spring. The points of interest in this case are the following:

First—Paralysis developed nine months after inception of disease, even though treatment was begun early.

Second—Twelve months after the same treatment was applied there were no signs of paralysis.

Third—From lack of proper attention, apparatus failed to support, and in one year more marked paralysis returned.

Fourth—In the second attack sensation was much impaired.

Fifth—The same treatment which failed at first, when reapplied proved effectual and cured the patient in five months.

CASE V.—B. J., age 5 years. No history as to inception of disease. June 29, 1890, has prominent kyphus, involving sixth, seventh, and eighth dorsal vertebra. Unable to stand unsupported; patellar reflex exaggerated and there is well-marked ankle clonus. General condition poor; cod liver oil prescribed and jacket with head spring applied. April 1, 1891, can walk a little unsupported; has developed Psoa's abscess. May 5, abscess opened; abundant discharge of pus. September 16, patellar reflex normal; no ankle clonus; walks well. March 20, 1892, has developed pulmonary tuberculosis. July, 1893, died of general tuberculosis and exhaustion from prolonged suppuration. In this case there is, first, marked deformity; paraplegia without altered sensation, and there is a marked depression of vital power; second, abscess follows the paralysis; third, gradual improvement until, at the end of fifteen months, all reflexes are normal and child walks well; fourth, abscess steadily increases; pulmonary tuberculosis proves fatal one year and nine months after treatment was commenced.

CASE XII.—Age 11 years. Upper dorsal diseased; duration, eight months; patient is unable to walk. At this time Flemming's extension was used and cod liver oil, with general tonics, given. Complete loss of sensation below the knee on left side and much impaired on right. October 1, 1884, jacket and head spring applied. May 1, 1895, walks well, unsupported. March, 1886, has tubercular ulcer of bowels. March 10, 1887, died of general tuberculosis. In this case we find upper dorsal Pott's, the paralysis occurring at the end of eight months. The points of special interest are the following:

First—Complete loss of sensation below the knee on left side and only impaired on right, the paralysis being complete on both sides.

Second—At the end of nine months' treatment, walks well.

Third—Develops general tuberculosis and dies.

CASE XIV.—J. V., age 3½ years. Developed Pott's in upper dorsal spine in April, 1884. Paraplegia developed two months later, when patellar reflex was much exaggerated and ankle clonus present. Spinal brace with head spring applied; cod liver oil prescribed: general condition bad; has suspicious cough. January, 1885, just recovered from severe attack of measles: can walk a little with support. July 20, walks very well; general condition improved. September 11, had fall, sustaining fracture of right femur at junction of middle with upper third. September 20, devel-

Digitized by Google

oped diphtheria. November 1, recovered from diphtheria. January 1, 1886, in good condition; walks well.

Here we have a case of paraplegia complete; eight months following the attack, had measles; nine months following this, fractured the femur; two months later developed diphtheria. Recovery followed in each and they in no way affected the steady gain in muscular power, and the case was cured of the paralysis in one year and nine months from date of attack.

CASE XVI.—J. C., age 7 years. Developed Pott's in cervical spine, March, 1887. Three months later was paralyzed in lower extremities. Patellar reflex so much exaggerated that tetanoid movements are produced. Thighs adducted; has incontinence of urine. Six months after attack is treated with jacket and head spring and potassium iodide given in increasing doses. January 30, 1889, one and a half years after attack, walks well; reflexes normal; no incontinence of urine. The interesting points in this case are:

First—Early appearance of paralysis.

Second—Unusual exaggeration of reflexes.

Third—Involvement of bladder.

Fourth—No trace of either lesion at the end of one year and six months' treatment.

It is very rare to have the bladder implicated, except in lesions of the lumbar spine, and then only in very grave cases.

CASE XVII.—C. G., age 12½ years. Developed Pott's in cervical spine, March, 1884. Three months later is unable to stand, lower limbs being completely paralyzed. Motion in arms limited, especially noticeable in hands. Spinal brace and head spring applied; potassium iodide given in increasing doses. May 28, one year after attack, no sign of paralysis; treatment continued. The point of special interest here is the involvement of the hands.

CASE XIX.—Age 5 years. Developed Pott's in cervical spine in July, 1890. Three months later left side was paralyzed. Four months later the right side was involved and the patient could not stand. Hands were considerably involved. January 1, 1893, walks well and has good use of arms.

This case is of special interest from the fact that one side is first paralyzed completely, and followed in four months by paralysis of the other, at this time the arms also being involved. It is quite rare to have this complication develop in this manner, it being usual for both sides to be afflicted to the same extent and at the same time.

CASE XXI.—T. P. developed Pott's in sixth and seventh cervical vertebra in January, 1893. No deformity; was completely paralyzed two months after first pain in spine; paraplegia complete; patellar reflexes exaggerated. October 1, five months after attack, can walk by pushing chair in front of him. October 20, walks about all day; reflexes normal.

There is no deformity in this case, although the paralysis was complete. This disproves the supposition that it is due to the deformity and supports the idea of pachymeningitis, with a secondary myelitis.

At the stated meeeting of the orthopedic section of the New York Academy of Medicine, December 15, 1894, Dr. R. Whitman presented the following case, which is of special interest in this connection:

"About the 1st of October, 1894, the child, two years of age, was noticed to be stumbling. When first seen by Dr. Whitman, about two weeks later, there was not the slightest pain and no angular deformity. The paralysis was that of the flaccid type, like that of anterior polio-myelitis. At the time reported (December 15, 1894), two months after the appearance of the paralysis, there was still no angular deformity of the spine, although a change in outline, due to muscular spasm, was apparent. Within a week there had been complaint of pain and the paralysis was now of the spastic type."

In the discussion, Dr. V. P. Gibney said the occurrence of paralysis before the deformity was exceedingly rare, and in a series of fifty cases of Pott's paralysis which he collected at one time it was the rule for them to develop at first a little stumbling, but examination failed to show exaggerated reflexes until some time later. It was well to emphasize the fact, so apt to be overlooked by the general practitioner, that Pott's disease may occur without the pain or other usual signs described in the books. These are the slow cases of "caries sicca."

CASE XXIII.—L. W., age 2 years and 8 months. always feeble; first noticed knuckle in back, December, 1894. Family history negative; walked well in November, 1893. Paralysis noticed in December and grew steadily worse until May 9, 1895, when child was brought to my office. Examination revealed Bosse, involving first, second, and third dorsal vertebra. Absolutely no power to move the legs, not even the toes. Appetite poor; bowels constipated; child very fretful; slept little, day or night; rapidly losing weight. Treated by Flemming's extension by means of modified Bradford frame and k. i. given in increasing doses.

May 31, some voluntary motion. August 29, reflexes normal; good power and voluntary motion. In this case there is complete paralysis five months after disease was discovered. Slight improvement twenty days after extension is applied and reflexes normal four months after treatment was begun. Such rapid progress is not the rule.

The lessons to be learned from these cases are the following: First, paralysis is second to abscess as a complication of Pott's disease; second, by allowing jars and falls, it often precipitates the latter complication; third, it is most common in lesions of the cervical and upper dorsal regions; fourth, the arms are seldom involved, and their involvement is secondary to that of the lower extremities; fifth, unless checked early in the attack, the paralysis is always complete; sixth, sen-

Digitized by Google

sation is more often affected than is generally supposed, but is seldom completely abolished; seventh, one leg may become paralyzed some months after the other; eighth, implication of the sphincters does not always justify an unfavorable prognosis; ninth, the degree of paralysis has no relation to the extent of deformity; tenth, prognosis is favorable under efficient treatment. I use the term "efficient" here because proper treatment is often advised, but does not prove efficient until the case falls into skilled hands.

It is too often supposed that this or that brace will cure a disease. On the contrary, there is no appliance that will even check the progress unless it fits the patient and the various mechanical indications are fulfilled. This means the most watchful and painstaking care, taken by one skilled in the accurate adjustment of any one of the various mechanical appliances recommended in the treatment of Pott's disease. This, and this only, will bring our case to a successful issue. These facts explain why the same treatment that has failed in the hands of one has proved successful with others.

Eleventh—Early diagnosis and treatment cannot be too strongly urged.

Twelfth—Deformity, when present, may be lessened, but never obliterated.

Thirteenth—Relapses may occur, the second attack being usually milder and of shorter duration than the first.

Fourteenth—Recovery from paralysis is usually complete.

PARANOIA.*

By J. T. HAY, B. S., M. D.,

LATE SUPERINTENDENT OF THE NEBRASKA HOSPITAL FOR THE INSANE LINCOLN, NEB.

This form of insanity is recognized as a distinct disease by all modern writers on the subject, but, while there is a substantial agreement regarding the characteristics of the trouble, a great variety of names have been applied to it. It is the verrüchtheit of the German writers, the paranoia primaria of the Italians, and the partial insanity of the French. Monomania, primary delusional insanity, progressive systematic psychosis, chronic progressive systematic psychosis, chronic delirium, ideational insanity, and intellectual insanity are other terms which have been used to designate practically the same condition. Spitzka, in the first edition of his work on insanity, describes this disorder under the name of monomania, while in a later edition he adopts paranoia as being more satisfactory. Among American asylum physicians, primary delusional insanity is perhaps the most common designation for this form of mental trouble.

A knowledge of the characteristics of paranoia is of importance to the general practitioner of medicine chiefly from a medico-legal standpoint. Paranoiacs frequently figure in our courts of justice, either as plaintiffs in civil cases, in which they seek to obtain justice for imaginary wrongs, or as defendants in criminal cases. In the former the physician, in recognizing the condition of the complainant, may be able to save the court and the person accused of wrong-doing a good deal of annoyance, while in the latter he may be able to protect the prisoner, who will never of his own accord protect himself from a criminal charge by a plea of insanity. Another reason why the paranoiac is of peculiar interest to the physician is that he is often a very dangerous character, while to the lay mind he shows no symptoms of insanity whatever. The physician, by recognizing the trouble in time, may, by having the patient promptly committed to an asylum, prevent the occurrence of one of those distressing tragedies which are so often the result of the delusions of this class of lunatics.

Paranoia is always primary; that is, not secondary to some other form of insanity. It is always chronic, and probably always incurable. There are no demonstrable pathological lesions. The predisposing cause is a vice of constitution usually inherited, but sometimes the result of injury or bodily disease. The exciting causes are various, and may be any strong emotional disturbance, the advent of puberty, adolescence, or the menopause. In typical cases the onset of the disease is gradual, and the early symptoms are generally hypochondriacal ideas which gradually develop into delusions of persecution. These delusions may be of a religious, erotic, jealous, political, or financial character. The patient believes there is a conspiracy to ruin him or to injure him in some way, and that his neighbors, friends, and relatives are implicated. Often some secret society or political party is accused of being the cause of all the trouble. Hallucinations of hearing, taste, and smell are very common. The agencies by which their persecutions are carried on are numerous. Sometimes it is electricity, sometimes poisonous gases or poison in the food, and sometimes mesmerism, mind reading, etc. The delusions are not, however, always of the character described, but may be of an expansive or ambitious nature. The patient may believe he is a great political reformer, a second Christ, a prophet, or a prince.

Whatever the subject of the delusions, or whatever their character in other respects, there are qualities which distinguish them from those of any other form of insanity. The delusions are fixed, whatever change taking place in them being usually an enlargement of the original idea; they have a distinct organization, and the reasoning is to a certain degree logical, but based on false premises. Such delusions are usually called systematized delusions.

The melancholiac may have delusions of persecution, but they change from time to time and are not of an organized character. So also the gen-

* Read before the Lincoln Medical Society, January 12, 1897.

Digitized by Google

eral paretic or the maniac may have delusions of aggrandizement, but they are not able to defend them with any degree of reason, and they are very changeable. These are unsystematized delusions.

Régis, a recent French writer, believes that paranoia is a progressive disease and divides it into three stages: (1) A period of inquietude or subjective analyses, in which the patient has vague sensations which he is unable to explain; (2) a period of delusional explanation, in which the patient reasons out in his own mind the causes of the morbid sensations of the first period forming the systematized delusions of persecution; and (3) a period of transformation of the personality, in which the delusions change to an expansive character.

The patient may reason that since he is persecuted by so many people he must be a person of importance, and this train of reasoning leads him to the belief that he is a man of wealth, a great political reformer, etc. There is but little emotional disturbance, and what there is is entirely due to the delusions. The bodily functions are usually normal. The patient sleeps, eats well, and ordinarily acts and converses like a sane person. While the tendency in this disease, like all other forms of chronic insanity, is undoubtedly toward dementia, the process here is very slow and many years may elapse without any marked degree of mental deterioration.

To recapitulate: Paranoia is a primary disease which attacks persons of a neuropathic constitution, usually inherited. It develops often at one of the physiological epochs of life and always runs a chronic course. Its chief characteristic is the existence of systematized delusions. It is not accompanied with any pathological lesions which we are able to detect. The general functions of the body are not effected and many of the faculties of the mind remain unimpaired. In some cases it seems to progress in distinct periods, but if such is the case, the periods are of long duration, and some observers do not admit that the disease is one of stages.

The following cases have come under my personal observation, and although the histories are very incomplete, they may serve to illustrate the subject:

A married woman of middle age, well educated, and of more than ordinary mental capacity, was admitted to the Nebraska Hospital for the Insane about five years ago, supposed to be suffering from the morphine habit. When admitted she was in bad physical condition and her mental state seemed to be that of a mild case of mania. Under restraint and treatment she improved physically, but did not regain her mental health as was expected. It was soon found that she had fixed delusions of persecution, and on inquiry of her friends it was learned that she had had similar delusions for a long time. She lived near a Masonic lodge room and had an idea that the Masons, one of whom was her husband, were persecuting her by means of electricity, the wires being concealed and connecting the two buildings. While in the hospital she was constantly annoyed by this electric influence, especially at night. She believed there was a system of wires all through the building and that the attendants used electricity as a means of discipline. After remaining in the hospital about a year, and making life miserable for everyone around her, this woman was removed by her friends and soon afterward made a trip to California for her health. While there she wrote me that the same persecution was going on and she had come to the conclusion that all institutions for the insane were the same, and that the attendants were able to reach their patients by electric influence in any part of the country. Some of the friends of this patient never believed that she was insane.

Another case is that of a man about forty-five years of age, who was admitted to the hospital seven or eight years ago. He was a farmer of fair natural ability and education and had been very successful in his business. His wife and neighbors had considered him eccentric for many years, but his sanity was not questioned until he suddenly shot and wounded one of his neighbors without apparent cause. His delusion was that the English and the Free Masons had been persecuting him for years. After admission to the hospital he soon became suspicious of the attendants and some of the other patients on his ward and accused them of being spies sent by the English government and the Masons to watch him. Sometimes at night these spies would come to his room and force poisonous gases through the keyhole and the transom, causing him much suffering. After such a night attack he would claim to be exhausted and would remain in bed for several days. He was fond of reading magazines and would often find passages which, in his opinion, referred to himself in some mysterious way which he would try to explain. Ordinarily this man showed no evidence of insanity, either in talk or action.

My third case is that of a carpenter of this city, whom some of you may remember. Seven or eight years ago he armed himself with several guns and began shooting at imaginary enemies from his room. He was finally arrested without bloodshed and sent to the hospital. Nothing was learned of his previous history. Being very reticent it was never possible to get the full details of his delusions, but he had an idea that some sort of a machine was in or attached to his head by which his enemies could annoy him. When questioned about it he would say, "It is still there," and close the conversation by the remark, "I guess you know as much about it as I do." He would justify his shooting by saying it had the desired effect. There was also some evidence of hallucinations of hearing in this case. Physically the man seemed to be in good health, working regu-

Digitized by Google

larly at his trade while in the hospital and never causing trouble in any way. In the spring of 1894 this patient was discharged, the superintendent believing him sane. Nothing more was heard of him until last summer, when he shot and wounded a man living in the same house. He admitted that he intended to kill the man, and gave as a reason that someone was burning his feet. He was arrested and examined by the board of insanity, found sane, and committed for trial for shooting with intent to kill. When the case came up for trial the judge, on the suggestion of the county attorney, ordered another examination by the board of insanity, which resulted in his being adjudged insane and returned to the hospital.

I will briefly describe one other case, which is nteresting on account of the difficulty in making a diagnosis. He was a man fifty-five to sixty years of age, a traveling salesman, and a stranger in the state. While stopping at a hotel in Fairbury he suddenly became violently insane and was arrested and sent to the hospital. On admission he was suffering from what was supposed to be an attack of acute melancholia, with delusions of persecution. He imagined that a mob had attacked him at Fairbury with the intention of murdering and robbing him. He improved rapidly and in a few weeks seemed to be well except for the fact that he could not be convinced that there ever was anything wrong with him or that the people of Fairbury had not tried to rob him. He remained in the hospital voluntarily for several months after his apparent recovery and never showed any evidence of insanity except the one mentioned. He was finally discharged and went to work at his business, selling silverware, in this city, frequently visiting the hospital to solicit orders. It was during one of these visits that I for the first time discovered the true nature of his delusions. I then learned that he was controlled by spirits. He believed that he had daily communication with his father, mother, and other friends in the spirit land, and that he could call them up, as one calls a person by telephone, and talk with them whenever he pleased. This power he had possessed for many years and the trouble at Fairbury was undoubtedly caused by the advice he received from spirits. Here was a man who would pass for a sane person in any community, unless by accident this one subject was brought up. He was very pleasant and gentlemanly in his conduct, and yet who would want to live near him or be associated with him, knowing that he was completely under the control of imaginary spirits?

That it is not always easy to diagnose cases of this kind, or that the subject is not well understood, is shown by the fact that in the trials of Guiteau and Prendergast—noted cases on account of the prominence of their victims—there was a great diversity of opinion expressed by the expert witnesses as to their insanity.

This form of insanity is quite common. Spitzka estimates that at least one-fourth of the cases of chronic insanity in our asylums are of this class. In this state probably not more than 5 per cent. of the admissions to the asylums are cases of paranoia, but a large number are undoubtedly sent to the penitentiary, while many more are at large in the community. I have had calls from several of them recently, and I have received letters at the rate of two or three a week from another for several months. It is a serious question sometimes to decide what should be done with such cases. Not all of them are dangerous, but it is often difficult to distinguish the harmless from the dangerous. In the case of the man with spiritual delusions, while he seemed very harmless on account of his peculiar delusions, he is liable to become exceedingly dangerous. I did not have the heart to attempt to deprive him of his liberty after I discovered his true state of mind, but I must confess that I felt somewhat relieved when he left the state.

After the commission of some serious criminal offense the problem becomes still more difficult. It does not accord with our ideas of justice to send such persons to prison or to the gallows, and yet the community is not protected by sending them to an asylum or hospital on account of the facilities for escape and the probabilities of their being discharged. If some suitable place could be provided for them where they could be kept securely and their discharge prevented by special statute it would not be so difficult to convince a court and jury of the existence of insanity in such cases. Some states have special institutions for the care of the criminal insane, where the chances of escape are not much greater than from a prison, and unusual precautions are taken to prevent the discharge of the inmates until they have completely recovered or have become undoubtedly harmless. The best solution of the problem would seem to be to provide some such place, and when a subject of paranoia or any other form of incurable insanity has committed or attempted homicide or any other serious offense, send him there to be kept for life, not as a punishment, but for his own good and the safety of the community.

In threatened heart failure use a hot water bag over the heart.

The professorship of bacteriology and pathology in the University of Missouri has lately been given to Dr. B. Meade Bolton, formerly of the Philadelphia, Pa., board of health.

The long, gloomy operating room of the hospital is hushed and still; soft-voiced nurses move quickly about; a skillful attendant arranges the cruel-looking instruments. Before administering chloroform to the patient, prior to the amputation, the kindly doctor asks him if he has any message for his friends. "Naw!" he murmurs wearily; "jest tell 'em that you saw me, an' dat I'm losin' flesh."

Digitized by Google

HYPNOTISM IN GENERAL MEDICINE.

A FEW SUGGESTIONS FROM PERSONAL EXPERIENCE.

BY J. T. ESKRIDGE, M. D.,
DENVER, COLO.

THERAPEUTIC VALUE OF HYPNOTISM.—I believe the therapeutic influences of hypnotism are due to mental impression. The value of hypnotism as a therapeutic agent depends upon whether the mental impression made upon a person in a hypnotic condition is capable of removing and taking the place of another mental impression of which the subject is possessed. Pain is the conscious recognition of irritation in some portion of the body. I cannot conceive of suffering without consciousness, so that all mental and physical distress is the conscious recognition of some disorder which gives rise to the mental impression of suffering. It seems to me that much injustice has been done hypnotism as a therapeutic agent by the extravagant claims made for it by some conscientious physicians. Whether it has, or should have, any place in therapeutics, we must decide after giving it a fair trial. So many of the results alleged to have been obtained by hypnotism seem so exaggerated that one is either led to doubt the honesty of the hypnotist or suspect that his judgment has been warped by enthusiasm. When I read of persons having been cured of fixed habits, that had existed for years, by one or two hypnotic treatments, I cannot help, with the results of my own experience, doubting the accuracy of such claims. In no case have I approximated success in permanently breaking any fixed habit except by repeated hypnotic suggestions. If I am correct in believing that the value of hypnotism as a therapeutic agent depends upon the permanency of the mental impression made during hypnosis, it seems reasonable to expect that the impression must be made sufficiently often to become a habit. We do not contract a habit by doing a thing once. Now when one habit or mental impression is to take the place of another that has existed for years, it seems to me that one is expecting too much if he thinks to accomplish this at two or three hypnotic seances. Of course much depends upon the depth of the mental impression, as to whether it will be transient or permanent. My experience has been that mental impressions made during hypnosis, if I endeavor to avoid perturbing my patient as much as possible, are not very permanent at first, and are only made so by repeated suggestions, extending over a considerable length of time. Although a person who has a fixed habit of which it is desirable to rid him may be readily hypnotized, yet hypnotic suggestions will have little effect in breaking up the habit until the subject desires such a result to take place. The desires of the subject in his normal condition, autosuggestion, aided by hypnotic suggestions, are potent in changing undesirable habits, but when the latter are opposed or even unaided by the former, they have but little or no permanent effect. I believe that hypnotism has a place in therapeutics, but I also am of the opinion that it is much less important than the writings of many hypnotists would lead us to conclude.

PAIN ANESTHESIA.—Inability to recognize painful impressions probably does not occur spontaneously in hypnosis, but it is the result of a suggestion. Even with suggestion, pain anesthesia is by no means universal in hypnosis. Were it not that we possess better and more reliable anesthetics in chloroform and ether, hypnotism would to-day be extensively employed in surgery. Dr. Esdaile records 261 surgical operations performed by himself in India while his patients were insensible to pain from hypnotic suggestion. Two hundred of the operations consisted in the removal of tumors varying in weight from ten pounds to one hundred and three pounds. Numerous surgeons have operated under similar conditions. I have induced pain anesthesia in a few instances for the removal of teeth. It is only when the administration of an anesthetic would be attended with danger to the patient that there is any excuse to resort to hypnotism in surgery.

Hypnotism has been employed on a number of occasions for the relief of labor pains. If the patient has been hypnotized a number of times before labor sets in, the chances are that hypnosis will be effectual in relieving suffering during the parturient state, but considerable time and patience are required to accomplished the same thing that a few inhalations of chloroform will do in a very short space of time. Auvard and Secheyron, after employing hypnosis on thirteen patients in labor, came to the conclusion that hypnotism is an uncertain and inefficient anesthetic, and produces a decided diminution in the force of the uterine contractions. (Annual, Universal Med. Sciences, Vol. II, 1-6.)

ORGANIC DISEASES.—The most that can be hoped for in the treatment of disorders of an organic nature from hypnotism is the relief of certain symptoms and the improvement of the organic functions, and thus aid Nature and Art in removing the lesion and getting rid of its results. In some, despondency may be replaced by hope, pain assuaged, sleep induced, the bowels regulated, and digestion improved. My experience with hypnotism has been that very few cases of organic disorders are met with in which this agent is more efficient than others that are less troublesome. Occasionally, however, a chronic organic disease is encountered in which hypnotic suggestions are exceedingly valuable for the relief of pain and the inspiration of hope. Three years ago a case of cervical pachymeningitis of several years' duration, presenting atrophy of the muscles of the hands and areas of anesthesia, was sent to me from a neighboring state. Pain was so great that sleep could only be obtained by the use of morphine, and he had become mentally depressed because he found it almost impossible to sign his

name to checks and official papers, an incapacity which would cost him his position in a large institution. He was easily hypnotized, and on suggesting that his pain would cease and he would no longer be despondent, he was able to sleep without morphine, and he became hopeful. This man to-day is still occupying his position and is able legibly to write his signature. While the muscular atrophy is no less, he does not suffer much from pain or despondency.

FUNCTIONAL DISORDERS OF THE NERVOUS SYSTEM.—I have never succeeded in improving the condition of a typical hysterical subject, although many writers, among whom may be mentioned Van Renterghen, Eeden, Bidon, Stembo, Sperling, Bernheim, Danillo, Moll, Strubing, Mendel, Briand, Ringer, and others, claim success in a fair proportion of cases, yet Danillo acknowledges that most of the cases relapsed after they had been helped or cured. I have had no experience with hypnotism in the treatment of chorea, but several cases have been reported cured by this means. In epilepsy I have signally failed. Insomnia may be cured in some instances by repeated hypnosis, but relapses are frequent if hypnotic suggestions are not repeated from time to time. The cases of stammering which were helped for a time relapsed after the treatment was discontinued. Neuralgic pains of a mild character may be relieved by hypnotism, but I have tried in vain to allay the acute pain of odontalgia and of trigeminal neuralgia.

INSANITY.—I have never succeeded in hypnotizing an insane person. Voisni, of Paris, claims to have been able to hypnotize about ten per cent., and asserts that good results have followed in some instances.

FUNCTIONAL GASTRO-INTESTINAL DISORDERS.—In nearly every instance in which I have used hypnotic suggestions in the treatment of functional gastro-intestinal disturbances the appetite has increased, digestion improved, and the bowels responded. Unfortunately, in most cases the hypnosis has to be repeated every few days, and patients relapse after the treatment is discontinued.

VICIOUS HABITS AND TENDENCIES IN CHILDREN AND YOUTHS.—Many state that these can be lessened or broken up by hypnotic suggestions. I have had no experience with hypnotism in the treatment of these cases.*

THE ALCOHOL AND THE DRUG HABIT.—If I may judge from my own experience, the greatest field for the employment of hypnotism will eventually be found to be in the management of persons who are given to the abuse of alcohol and the use of morphine. Cocaine habitues are so nervous and intractable that it is difficult to influence them by hypnotic suggestions, even when they are readily hypnotizable. Ford, Wetterstand, Tucker, Tooth, and many others report excellent results in the treatment of dipsomaniacs by means of hypnotism. Danillo's results were negative in two cases. Moll, in his work on hypnotism, relates six cases of chronic alcoholism, eleven of morphinomania, and three of nicotinism cured. I have used hypnotic suggestions in the treatment of the alcohol and drug habit in several cases, and have obtained varying results. In no instance have I succeeded in breaking up such a habit, or even lessening it to any great extent, unless the subject was desirous of being freed from it. To obtain the best effects from hypnotic suggestions, the co-operation of the subject is necessary, and without this the treatment, at best, will be prolonged and often unsatisfactory. If a person who is addicted to the alcohol or opium habit is hypnotizable and desirous of breaking off the habit, is it always possible by means of hypnotism to insure success? It is not. There are so many modifying conditions that it is not possible to predict with any degree of certainty what class of cases will give the best results. It is not wise to depend upon hypnotism, to the exclusion of other agents, in treating these cases. Hypnosis in most cases will have to be repeatedly induced, as the subject is likely to relapse when left to his own unaided resources. The most effectual suggestions are those which assure the patient that he will have a disgust for the agent and its effects, and that those feelings which he has heretofore experienced, and which have compelled him to resort to alcohol or opium, will not return.

Hypnotism has been employed with apparent success by a number of hypnotists for the relief of menstrual disorders, onanism, and nocturnal eneuresis.

In conclusion, I wish to reiterate that while I believe that hypnotism, properly used, has a place in medicine, it is a rather limited one. In appropriate cases it is an aid to other measures and should not be employed as the sole means of cure in scarcely any case, no matter how trivial the ailment may be.

*A little patient has recently come under my care in which hypnotic suggestions have seemed to stop, for a time at least, vicious habits.

HORSLEY'S ANTISEPTIC WAX.—The value of Horsley's antiseptic wax for controlling undue bleeding from the cut surface of a bone cannot be overestimated. This wax is easily prepared, is antiseptic, and is always ready for use. It consists of beeswax seven parts, almond oil one part, and salicylic acid one part. Several years ago Professor Keen introduced this preparation into the Jefferson Hospital. He uses it extensively to arrest bleeding from the bone during an operation. The bleeding that sometimes follows the sawing of a bone during an amputation, excision, or resection can be checked by pressing a small quantity of the wax against the bleeding surface. After the removal of a growth from the jaw, such as an exostosis or an epulis, the bleeding can be readily controlled by an application of this agent. In bleeding from diploe or cancellous bone this wax is of great service.—College and Clinical Record.

Digitized by Google

SPLENIC MYELOGENOUS LEUKEMIA.*

By B. F. CRUMMER, M. D.,

PROFESSOR OF CLINICAL MEDICINE AND DISEASES OF THE CHEST, CREIGHTON MEDICAL COLLEGE, OMAHA, NEB.

GENTLEMEN: This patient, Mrs. R., is 36 years of age; widow. She has resided most of her life in Missouri and Kansas. Her family history is negative. She came to the hospital three weeks ago, complaining of progressive weakness, dyspnea on exertion, and occasional attacks of epistaxis. She has had for some months an irregular form of fever, and was aware of a tumor in the left hypochondrium. The patient has never been ill, excepting that for one season, six years ago, while residing in a malarious region in Missouri, she suffered from chills and fever for a good part of one summer. However, upon changing her residence, she apparently recovered, and is quite sure that the splenic enlargement now present was not noticeable until about one year ago, when the present symptoms began. She says that she has been treated for chronic malaria, but has progressively grown a little worse. Since entering the ward she has had a moderate rise of temperature nearly every day (101.5 degrees to 102.6 degrees F.), and her pulse varies from 96 to 116. She has been dressed every day, but assumes the recumbent position most of the time, and suffers from dyspnea on moderate exertion. The urine contains no albumin nor casts, and there is no puffiness of the legs, but pressure over the tibiæ elicits pain, and you will observe that the enlarged spleen extends almost to the crest of the ilium and beyond the umbilicus to the right.

It would be a rather easy matter in this woman's case to pass her on as a not specially interesting example of malarial cachexia, with the old-time "ague cake." However, it appeared to me that there were some inconsistencies in such a diagnosis. In the first place, it will be observed that her acute malarial symptoms existed several years ago, while she has only noticed the splenic enlargement, progressive weakness, and dyspnea during the past year. Although her present fever is of an intermittent character, quinia has no effect upon it. While she does not present the aspect of profound anemia, and has no hemic murmur at the base of the heart, you will notice that when the lip is turned down the mucous membrane is decidedly pale. The pain and tenderness over the region of the tibiæ are unusual in simple malaria, and the symptoms altogether indicate a profound constitutional or blood dyscrasia. Therefore, we have instituted a careful microscopic examination of the blood, with the following result, which I hope each member of the class will be able to verify by looking at the stained slides:

Leucocytes increased to the proportion of one to ten of red blood cells.

The stained slides show the eosinophiles relatively diminished (really increased). Large mononuclear leucocytes (neutrophiles) relatively diminished (estimated fifty per cent).

Myelocytes very numerous (estimated thirty per cent).

Very large number of nucleated red blood cells.

Relative diminution of the lymphocytes.

The presence of myelocytes, which, you will remember, are not found in normal blood, is, according to Osler, the most characteristic feature of the blood in leukemia. They are supposed to be derived from the bone marrow.* They are as large or larger than the large mononuclear leucocytes and are similar in form to them, but they differ from them in the fact that the protoplasm is filled with fine neutrophilic granules. The other changes in the blood clearly belong to a case of leukemia.

With this report, aided by the history and symptoms, we are at once enabled to arrive at an exact diagnosis of the affection, and to recognize leukemia of the splenic myelogenous variety. This illustrates in a forcible manner the immense advantage of a microscopical examination of the blood in this class of diseases, for by no other means could we have more than a general belief that her case is truly a specific pathological entity, and not simply one of malarial cachexia, associated with an enlarged spleen.

Leukemia is a somewhat rare disease. Osler has seen but seventeen cases—eleven in Canada, two in Philadelphia, and four in Johns Hopkins Hospital—in two years. I recall at present two well-marked cases, both of which proved fatal. The first was in a boy of thirteen, and ran an acute course, with irregular rises of temperature to 105 degrees F., epistaxis, gastro-intestinal disturbance, and greatly enlarged spleen. He lived only three months. The other was a telegraph operator some thirty years of age. He led a very sedentary life, confined for many hours a day in badly ventilated quarters, and had suffered from supposed malarial poisoning. One year after the onset of the disease the spleen filled the whole abdomen, and the leucocytes were in the proportion of one to five of red blood cells. Death occurred in a little more than two years.

In neither of my cases were the lymphatic glands involved, and you will notice that this is true in the case before us. Such involvement must be rare, as Osler saw this form only once in his seventeen cases.

The prognosis is grave. Cases occasionally recover, but death is the rule in from one to two years. Up to the present time hygienic treatment, fresh air, and tonics, especially arsenic, have been our main reliance in the treatment of this affection. However, at the International Congress in Rome, Professor Fraser, of Edinborough,

* A clinical lecture delivered at St. Joseph's Hospital, Omaha, Neb.

* Professor Cabot, of Boston, while admitting that myelocytes do occur in other diseases, insists that their presence in enormous numbers (twenty to sixty per cent.) is absolutely characteristic of the splenic myelogenous variety of leukemia. He adds: "Between the largest number of myelocytes ever recorded in any disease, other than leukemia, and the smallest number ever found in the latter disease, there is as great a difference as there is between the minute traces of sugar to be found in the normal urine and the marked glycosuria of diabetes mellitus."

Digitized by Google

read a paper on the treatment of profound anemias by the ingestion of bone marrow. His cases were pernicious anemia and the results reported most excellent. But about the same time Dr. W. G. Bigger reported in a London journal the use of bone marrow in leucocythemia. His patient was a boy of twelve, and he states the result as an entire cure, which was so prompt as to be "little short of marvelous." These results led me to recommend the bone marrow for our patient, and she has now been taking it regularly for about twenty days, and there is no doubt that she has somewhat improved, having less dyspnea on exertion, more muscular strength, and decidedly less tenderness over the tibiæ. There is no perceptible change in the spleen up to the present time. We shall watch with much interest the future progress of this case and report to you the condition of the blood and such changes as occur in her general symptoms.

NOTE.—This patient left the hospital four months later with a great improvement in her condition, practically a symptomatic cure, and a marked decrease in the size of the spleen. Unfortunately, no report has been received from her, although several months have elapsed. In this case the fresh marrow, spread on bread, was the form used, and the only other treatment was arsenic, in the form of Fowler's solution.

EUCAINE AS A LOCAL ANESTHETIC.

BY G. W. SHIDLER, M. D.,
YORK, NEB.

The principal object of this paper is to call the attention of surgeons to the use of a certain class of anesthetics, whereby many minor surgical operations may be performed without the complete anesthesia of chloroform and ether, and the consequent danger attending their use. Many persons having hemorrhoids, fistula in ano, small tumors, laceration of the cervix and perineum, in-growing nails, and many other ills that can be borne, are inclined to "suffer the ills they have rather than fly to those they know not of." There is a universal dread amongst the laity, and also in the profession, to the use of chloroform and ether; but when you can assure your patient that the only pain experienced will be that of introducing the hypodermic needle, with almost no danger, it changes matters materially, and much work can be done by local anesthetics to relieve suffering humanity that would otherwise remain undone.

There has recently been introduced a local anesthetic called "eucaine," with which I have been performing a number of operations, with such complete satisfaction that I am anxious to have others use it also. This anesthetic has nearly the same chemical composition as that of cocaine, and possesses most of its virtues and but few of its vices. It is claimed for it that it is at least from fifty to seventy-five per cent. less toxic, and is equal, if not superior, to cocaine as a local anesthetic. It can be used in a saturate solution, either topically or hypodermically, to the extent of from four to six ordinary syringes full of a ten per cent. solution, without any apparent injury to the patient, and if much hemorrhage is the result of the operation, much larger quantities can be used with safety. In using a saturate solution, the infiltration of the tissues is avoided and healing by first intention is almost universal. I have used as much as four drachms of a saturate solution in one single surgical operation, with no bad results.

To demonstrate the usefulness of this remedy, I will report a few cases upon which I have used it. The first use made of it was for the removal of a No. 4 shot located near the carotid artery, where it was crossed by the branches of the facial nerve. After injecting four or five drops of a saturate solution of eucaine, I made a perpendicular incision about one inch long, just over the shot. After injecting from five to ten drops in the deeper tissues, I used a long-jawed compression forceps, and managed to spread the tissues instead of cutting them until I reached the shot and removed it without injury to the nerve or artery, and with no pain to the patient, with the exception of the use of the hypodermic needle. In two days the union was complete, and it is now almost impossible to find the mark of the incision. The next time when I used it was when I was called to a dentist's office to give chloroform for the removal of a molar that had been broken on a level with the alveolar process. The dentist had made several ineffectual attempts to remove the root, and when I proposed injecting the medicine in the gum it was looked upon with doubt by both patient and dentist. I injected two minims in the gum on the outer and inner side of the tooth, and the dentist proceeded to cut through the alveolar process and removed the root with but little pain. The patient afterwards told me that he was quite certain that had he not been so frightened by the frequent efforts of the dentist before I came, that it would not have hurt him.

I presume I have used this remedy a dozen times for the extraction of teeth, and several times for the removal of the entire set, and the results have been almost painless, and with no toxic effects. I am firmly convinced that if a few drops were injected near the inferior dental foramen, and mental foramen of the inferior maxillary, that fillings could be put in lower teeth without any pain, and like results could be obtained in filling upper teeth.

The following are some of the operations I have performed under the influence of eucaine:

First—Laparotomy, for appendicitis. The patient was a lady weighing 225 pounds. The abdominal walls being from two and a half to three inches thick, required an incision at least six inches in length. This was all done under the personal supervision of the patient, who carried on a conversation with the operators and suffered

Digitized by Google

but little or no pain during the entire operation. This operation was performed December 16, 1896, and the patient is now well and performing the ordinary duties of housewife. I have also enucleated one eye, in which the patient would not believe that the eyeball had been removed until he could see with his other eye that such was the case.

Operations for hemorrhoids, eight; for laceration of the cervix, two; dilatation and curetting of uterus, four; compound fracture of the skull, with injury to the longitudinal sinus, one; in-growing nails, three, besides a number of other operations that I cannot now remember. The solution which I have used has been an aqueous, saturate solution, which is about that of ten per cent. So far I have seen no poisonous results whatever. However, it should not be understood that this remedy is entirely innocuous. The article used by me was obtained from Messrs. Schering & Glatz, New York, and is so nearly identical, chemically, with that of cocaine that it is difficult for any one but a chemist to describe the difference.

This remedy is destined, in my opinion, to have a wide field of usefulness, and I would recommend a trial of it to all those of the profession who have not tried it. The only objectionable effects that I have noticed in the use of it is in one or two instances there has been a slight slowing of the heart's action. In one case I think the pulse became as low as sixty per minute, but no other inconveniences than those have been noticed. Messrs. Schering & Glatz, of New York, will furnish literature concerning eucaine, showing the relative toxic effects as compared with cocaine, etc., etc.

Its relative merits, when summed up, amount to this: It is from fifty to seventy-five per cent. less toxic than cocaine. The toxic effects of eucaine are shown by a slow pulse, instead of a rapid one, as in the use of cocaine. The anesthesia is fully equal to that of cocaine. Eucaine has no ischaemic effect upon mucous membranes, but rather has a tendency to congest them, and its solutions can be rendered sterile by heat without injuring them. By using a six per cent. aqueous salt solution as a solvent, the pain is less noticeable when using the hypodermic needle. The cost is something less than cocaine. It is better to always use a saturate solution of eucaine, as it requires less fluid, less infiltration of tissues, and permits of more rapid repair. I find that the rapidity of repair depends largely upon the extent of infiltration of tissues.

THE patronage at the free baths of Baltimore last summer was about 25,000, says the Maryland Medical Journal.

DR. WM. OSLER says that the medical men of Maryland could, by the aid of the public and politicians, stamp out typhoid fever from that state in less than three years.

THREE UNUSUAL RECENT CASES FROM GENERAL PRACTICE,—FOREIGN BODY IN THE AIR PASSAGES, PHANTOM TUMOR, AND PERFORATIVE APPENDICITIS.

BY F. A. LONG, M. D.,
MADISON, NEB.

The cases I am about to relate may have no particular scientific value; still they will not be without interest to the profession, on account of their rarity.

CASE I.—A man from the country called one Sunday morning with the story that his sixteen-months-old child had, Friday noon, accidentally gotten a piece of roasted coffee bean in the air passages; that the child at once got blue in the face, began coughing violently and breathing hoarsely and laboriously, and had so continued. A probable tracheotomy occurred to me, and as I was just convalescent from an acute illness, and was weak and nervous, I at once called to my assistance Dr. P. H. Salter, of Norfolk. The child presented an expression of great anxiety, with pale, almost bluish lips, and rapid, harsh, croupy breathing. There was deep retraction of the upper intercostal spaces. Respiration, 45; pulse, 150; temperature, 100. Laryngoscopic examination revealed nothing. By examination of chest the foreign body as located in the upper part of right lung, possibly at the junction of the right bronchus with one of the smaller bronchi, for the lung was not wholly occluded. It impressed us as an almost hopeless case, but a mixture of paregoric and syrup of ipecac in syrup was prescribed. It afforded some relief to the little patient, although the first week the child had to be held in the upright position constantly, to afford easier breathing. The child also always inclined to right side. After this the symptoms gradually subsided somewhat, but on the twenty-third day a violent fit of coughing and laboring for breath came on and lasted about six hours, when, as suddenly as it began, cough stopped, breathing became calm, and child fell into a sleep lasting some hours. During the night the bowels moved and something dark in the stools attracted the attention of the parents. It was the coffee bean, very much swollen, but without sign of decay. The child was well! She had coughed up, swallowed the bean, and passed it by the bowels.

CASE II.—A lady of German birth, aged 39, came to me from the field of a neighboring practitioner in December, complaining of a tumor. Her story was that in the spring she had twice passed over the regular period, the flow coming on at the end of six weeks, each time. Since then the flow was regular. About May she thought the abdomen began to develop some, but had not been increasing since midsummer. For over six months she had felt movements, like fetal movements, by day or night, sitting, standing, or reclining, and lately they had become a great an-

Digitized by Google

noyance. Her condition worried her a great deal, for she thought she had either a tumor or an extra-uterine pregnancy, something about which she had very crude ideas. She presented to me the appearance of a sensible, hard working, overworked woman. By bimanual examination I outlined the uterus and tubes, and found them normal; neither did I succeed in getting anything between my hands that gave any suggestion of tumor to my touch. She complained that my manipulations, while giving her no pain, caused the movements to be more active. I exposed the abdomen and presently a lump rose up on the left side, and with a quick, wavelike motion passed across the abdomen. Again and again these movements were noticed, and, so far as I took note of them, the lump or tumor would rise on either side, high up or low down, and move in any direction. Possibly I did not observe this closely enough to report correctly, but this is my impression. Again repeating the bimanual examination, to guard against possible error, I gave a diagnosis of phantom tumor, and receiving permission to make diagnosis positive by chloroformization, I did so, whereupon the belly flattened out at once and no amount of manipulation would cause a movement while anesthetized. I gave the woman a tonic, an injunction to rest her overworked nervous system, and sent her home happy. Some time afterward I received a letter saying she had had no movements since the day she was at my office.

CASE III.—A six-year-old girl came out of bed the morning before Christmas complaining of "belly ache," soon vomited twice and bowels moved once, but with no relief from pain. There was no more vomiting or purging during course of the disease. Under the impression that the trouble was colic, due to costiveness, castor oil was administered on three successive mornings, without, however, affecting the bowels. Finally medical assistance was sought, because child had difficulty in urinating. I first saw child on the afternoon of the third day. Her temperature was 102½, pulse 144; abdomen tympanitic, very tender, and with an area of dullness and greater sensitiveness below umbilicus and slightly to the left. Prostration was not extreme. Enemata of salts, glycerin, and turpentine produced no movement. I halted between two opinions: Either I had an appendicitis at an unusual site, or a volvulus with a temperature. I inclined to appendicitis, gave salines by mouth, and applied hop poultices. Six hours afterwards I found child with a normal temperature, pulse 150; abdomen, no change, except that pain, tenderness, and dullness seemed more to left. Bowels had not moved and I could not get a movement. I changed my diagnosis to volvulus; fully explained danger of the case; asked for counsel, with a view to operating. Dr. Frink, of Newman Grove, and Dr. Smart, of Madison, came, and concurred in the diagnosis of volvulus. The operation was done at 9 A. M. Sunday, the morning of the fourth day of the illness. The incision was made over the site of the supposed volvulus, and on opening the peritoneal cavity pus welled out of a pocket—appendicitis, after all! There were extensive adhesions and large areas of bowel seemed denuded of peritoneum by the acrid pus. The patient acting badly under the anesthetic, the appendix (which was one of the right angled variety, ruptured in two places and with a fecal concretion) was grasped and brought to the opening (not hard to do in a child), ligated, cut off, stump cauterized, and the abdominal cavity well flushed with several gallons of hot, sterilized saline solution, drainage provided for and the incision closed and dressings applied as usual. The child recovered well from the anesthetic, but died from asthenia four hours later.

The case presents these unusual features from a diagnostic point of view: Dullness, greatest tenderness, and, apparently, bogginess on the left side. Certainly the appendix had already ruptured and the peritonitis become general when I first saw the case, and obscured the diagnosis. At least two of us had had considerable diagnostic and some operative experience in appendicitis, so that the error was not wholly due to the ignorance of inexperience.

THE CURE OF STRICTURES OF THE URETHRA BY ELECTROLYSIS.

BY DR. H. C. SAMPLE,
CHICAGO.

The cure of strictures of the urethra is a subject that has been much discussed by advocates of the various methods now in vogue. But none of these methods are successful except that by electrolysis, and even this sometimes fails, due to an improper application, or applied under adverse conditions.

The experienced electrotherapeutist has no definite periods for treating these diseases, but treats them according to the conditions presented. If he finds the patient suffers from pain while urinating, or there is a bloody discharge, electrical treatment is not indicated, and waits until it subsides. Also, when electrical application is made and he finds it very tender, he treats it gently, using very little current and of short duration. These are the essential points of curing strictures of the urethra by electricity.

The attempt to cure strictures by dilatation is barbarous and should not be resorted to, as the object sought is never attained. Also, the cutting process is dangerous, and no permanent benefit is accomplished; for when a stricture is cut it will invariably reunite, and when such union occurs a hard, bony or calcareous rib will be formed, upon which electricity has no effect, unless it be softened by an injection of ichthyol. The number of ichthyol injections depends upon the hardness of the rib formation.

When I find a stricture has been cut I have the patient take daily injections for a week, and at the end of that time, everything else being favorable, I try to dissolve the stricture, and if not suc-

Digitized by Google

cessful, have him continue the injections for another week. This will be found sufficient.

The ichthyol injections will also destroy any germs that may be present, besides destroying the deposits at union, thus leaving the membrane in a better condition for the dissolution of the stricture.

A stricture of the urethra can be treated and cured at one sitting, if it is desired, by having the proper appliance to do it. A small graduated exploring probe is used to find what the exact depth and kind of stricture is present, and if satisfied that the patient is in a condition to be treated, then cocainize the urethra with a two per cent. solution. If it be annular, use the ordinary Simmons olives, commencing with the smallest and finishing with No. 26. If the stricture be on one side of urethra, then use the improved insulated Simmons olives, which have one-half of the olive covered with hard rubber. In no case should undue pressure be used, for the current will dissolve the stricture, and all that is required is a gentle pressure, so as to give a good contact with the stricture. Never use more than ten milliamperes of current.

The insulation of these olive electrodes is for the purpose of preventing cauterization of the membrane on the opposite side. The negative pole of the galvanic current is connected to the electrode in the urethra, and positive may be located on the thigh, and when the last olive passes through freely use an injection of calendula and glycerin, and have your patient lie down for about two hours.

If more than one stricture be present, simply treat the one, and allow two weeks to elapse before treating the next, unless it be absolutely necessary to enlarge others to allow a freer flow. It is preferable, when there is more than one stricture, to treat the whole canal, using but one or two olives at each seance.

114 Dearborn Street.

Intravenous Saline Injections.—Dr. W. W. Grant, of Denver, reports the following case in the Medical News of January 16: Mrs. M., aged 45, married and mother of grown children, had been ill several months in the winter and spring of 1895 with some pelvic inflammatory trouble, which proved to be tubal gestation. She was confined to bed at intervals. In April she grew worse and septic symptoms became manifest. About the middle of May I was called in consultation with others. The patient was now in a serious septic condition, with small but decided tumor at the site of the left ovary and tube. During the previous twenty-four hours she had had two severe hemorrhages, with pus, from bowel, which, without doubt, had come from rupture of abscess into rectum. For thirty-six hours gradual but deepening coma was manifest. Though the condition was desperate, in consultation it was deemed best to operate at once. Under ether anesthesia, I opened the abscess through the abdomen, adhesions protecting the general peritoneal cavity. Blood clots and debris of tubal gestation were quickly turned out and the cavity irrigated and drained with antiseptic gauze, the operation being done in a few minutes. The condition of the patient did not justify the hope that she would live an hour.

While using other means, I had the little transfusion apparatus of Jennings and a sterilized saline infusion in readiness. There was also a pint of peptonized milk at hand, so I determined to mix the two solutions, in equal parts, and inject through the median basilic vein. Peptonization of milk (which had been prepared by a capable nurse) would prevent its coagulation. The milk and ordinary saline infusion for transfusion were mixed and strained. I immediately opened the vein, and, with the assistance of the attending physician, injected a quart slowly, at a temperature of about 100 degrees. The coma slightly improved, but only temporarily; but the pulse, which was 160, did improve quickly and decidedly in volume and beats, dropping to 130, with an improved tone. This condition was well maintained, but after a few hours gradually declined. About five hours from the first injection, the same quantity of saline and milk was injected through the same vein, with same manifest improvement in the circulation. But the coma gradually deepened, the circulation, after several hours, again failing, with no improvement in other respects. The case was regarded as hopeless and the injection was not repeated. The patient died twenty hours after the operation. The profound exhaustion from sepsis really caused death. Though the fatal result was aided by hemorrhage and shock, these, I believe, did not determine it. Though I had not heard before of milk being used in this manner, I believe its effect was good, and the transfusion undoubtedly prolonged life. I should use it again under similar circumstances, and believe it indicated in shock and loss of blood, and worthy of impartial trial in certain septic cases, even though much less profound than the one embodied in this report.

The use of warm saline infusions in the peritoneal cavity during some laparotomies, to prevent as well as to relieve shock, is known to surgeons. The application of the saline solution to the large peritoneal surface, by its absorption, and probably by the heat to the large nerve ganglia, is of greatest benefit; yet in some of the more urgent cases the good effect, I believe, would be more quickly manifested by its intravenous use, and, if support is needed, by the addition of carefully prepared peptonized milk.

Perhaps a Misprint.—The local paper, speaking of a street accident, said: "Dr. Jones was quickly summoned, who, after examining the patient's purse, decided that the case was hopeless. —Exchange.

Digitized by Google

Selected Article.

A NEW METHOD FOR THE RADICAL CURE OF INGUINAL HERNIA WITHOUT BURIED SUTURES.

By DRS. SIMON DUPLAY and MAURICE CAZIN, PARIS.

There is hardly a surgeon—even among those who boast of being able to operate under completely aseptic conditions—who has not been annoyed by remote ill-effects from the elimination of a buried suture, in the radical cure of hernia, for instance. A patient leaves the hospital after having undergone a perfectly aseptic operation and recovered under excellent conditions, without anything to suggest an ultimate complication; a few weeks or months elapse, and then, probably as a result of an ephemeral general infection of some kind, or of a local infection which so far has remained latent, an abscess develops around one of the sutures buried in the tissues, which have not been absorbed and continue to form a locus minoris resistantiæ, so to speak, at the spot where they have been applied.

Having on several occasions met with such accidents in the case of patients operated upon at the clinique of the Hôtel-Dieu, or in other services where the asepsis of the material employed cannot be suspected, we have endeavored to do away completely with buried sutures in the radical cure of inguinal and femoral hernia. For six months we have employed in these operations at the

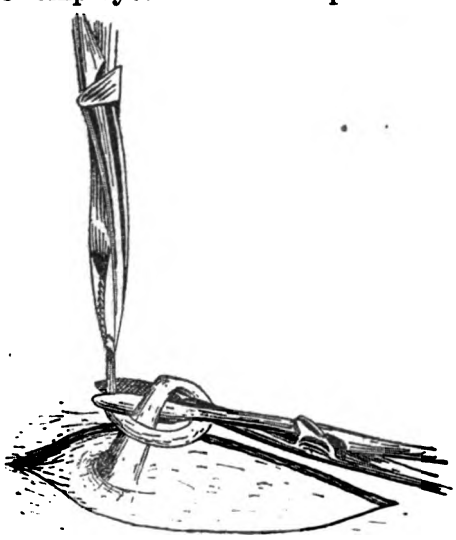


Fig. 1.

Hôtel-Dieu a method by which no foreign body of any kind is left in the wound. Not only have all the patients operated upon, twenty in number, made an excellent recovery without the slightest untoward accident, but in the majority, whom we have recently seen again, within from six weeks to six months after the operation, recovery had been perfectly maintained, so that there appears to be no further danger of any post-operative complication.

In order to completely do away with buried sutures, we must abandon the usual method of operation, which comprises (1) ligature of the hernial sac by one of the ordinary means; (2) suture, or, more correctly, approximation with the aid of buried sutures, of the pillars; (3) ligature of the vessels and deep sutures of the soft parts, which are employed by certain surgeons in performing the radical cure of hernia. It is needless to state that we do not refer to ligatures necessitated by

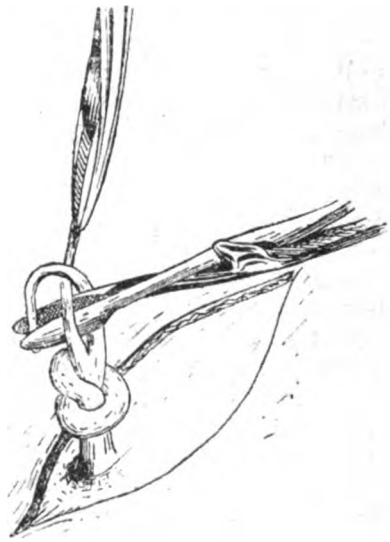


Fig. 2.

resection of a portion of the herniated omentum, for silk sutures left in the peritoneal cavity do not give rise to the remote ill-effects sometimes determined by sutures buried in the abdominal wall.

Ligature of the arterioles may be easily avoided by twisting, which never fails to completely arrest the hemorrhage.

With regard to the suture of the soft parts, more particularly approximation of the pillars by means of buried sutures, we are of opinion that, in the majority of cases, the object aimed at may be attained by the use of silver wire sutures, properly placed and comprising at each margin of the wound as large a quantity as possible of the soft parts. The coaptation of the tissues under such conditions is excellent, and, when the sutures are removed, the cicatrix of the inguinal ring is dense and firm, as we have found in all our patients. It is only in the comparatively small number of cases in which a good result can be obtained only by Bassini's method that it is necessary to employ a deep row of buried sutures.

In the majority of cases, therefore, a perfectly firm cicatrix is obtained with two or three deep silver wire sutures, including the pillars, and four or five others, comprising all the soft parts which can be gathered up in front of the inguinal ring, just as well as with deep buried sutures.

The novelty, however, of the method of operation to which we wish to call attention consists principally in the manner of closing the sac. We have, in fact, succeeded in doing away with plac-

Digitized by Google

ing a silk ligature on the hernial sac, employing instead the following method, from which we have invariably, in all patients operated upon, obtained most satisfactory results.

The cavity of the sac having been opened and examined with the finger, the existing adhesions are destroyed, and a portion of the herniated omentum is resected if necessary, after which the sac is completely dissected out with the greatest care, the peritoneal layer alone being taken. This dissection is pushed until parts of the peritoneum normally situated two or three centimeters above the inguinal ring can be pulled out. An assistant then takes hold of the sac at its base, and the operator ties all of this sac into a knot (Fig. 1), which is pushed up as far as possible before it is drawn tight. To prevent this knot from becoming untied, if the sac is sufficiently long, another, and even a third, similar knot is tied, one after the other, or a double knot is made, though this is less satisfactory from the point of view of firmness; then the entire remainder of the sac is split in two, and the strips thus obtained are tied together once or twice (Fig. 2). Lastly, in order to insure absolute firmness, a hole may be made in one of these strips and the other passed through it (Fig. 3), so as to prevent all possibility of the knot slipping; this manœuvre, moreover, may be repeated two or three times (Fig. 4), if the strips are sufficiently long. When the sac is short, it is frequently impossible to tie more than one knot with the entire sac; in this case the knot is se-

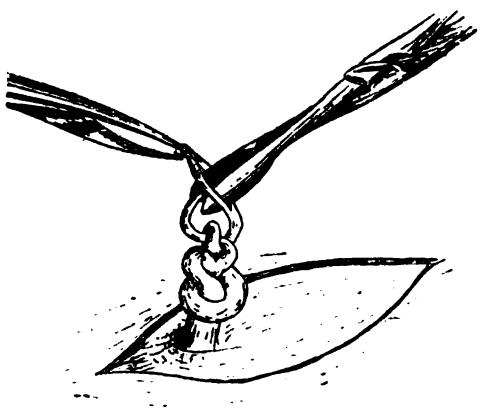


Fig. 3.

cured, as stated, by splitting the remainder of the sac in two strips, which are then tied together once or twice (Figs. 2 and 3).

All these manœuvres, which are executed in less time than it takes to describe them, are carried out, not with the fingers, which frequently would not be possible, but with the aid of forceps, when they are executed with ease, as will be seen from the accompanying drawings, for which we are indebted to Mr. Ombredanne, our house surgeon.

The last knot having been tied, the sac is released, when it disappears at once in the abdominal cavity, exactly as when the sac has been resected in the usual operation. In all the patients operated upon we found that the highest point of the knot farthest away was invariably situated at least three or four centimeters above the internal inguinal ring.

It then only remains to finish the operation in the usual way, except that silver wire sutures are employed, as stated above.

In cases of old standing hernia the sac may be so thick as to preclude its being tied in its en-

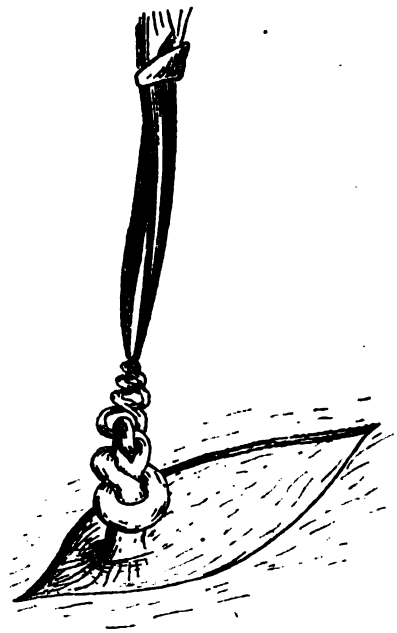


Fig. 4.

tirety. In two cases of this kind we were obliged to give this up and split the entire sac in two at once, tying the two ends together several times in the manner indicated in Figs. 2 and 3; in one case we even split the sac into four equal parts, and tied them together two and two, the results thus obtained being very good.

The radical cure of hernia without buried sutures has already been attempted by Dr. Poullet, who has devised for this purpose a method of tendinous autoplasty. Our procedure, which differs entirely from that of Dr. Poullet, is much simpler, and we are of opinion that, in the majority of cases, it should be preferred to the usual method of ligature of the sac, because it does away entirely with the possibility of ill-effects ultimately resulting from the presence of buried sutures in the parietal tissues.—The Medical Week.

Temporary Relief.—Doctor: "Are you troubled with cold feet?" Fair Patient: "Not now. He's off on a business trip."

Practical Medicine says: To differentiate between a tumor of the right kidney and a tumor of the liver, inflate the rectum and colon. If the tumor is of the kidney the inflated intestines will lie in front of it, and there will be a tympanitic resonance; if the tumor is of the liver, it is rendered more prominent and dullness occurs on percussion.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$2 00
Single copies..... 20

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, FEBRUARY 15, 1897.

THE committee on arrangements for the Medical Society of the Missouri Valley cordially invite members to come to the Lincoln meeting. The same cordial invitation is extended to all regular physicians throughout the Missouri valley. Come and join the best society in the west.

WE publish elsewhere in this issue the proposed new medical bill, Senate File No. 236. While it is not perfect, and may need one or two amendments, it is a bill which, if it becomes a law, will put Nebraska up with a large number of her sister states. It may not be as strong or as advanced as the law of New York, Minnesota, and one or two other states, but it is good enough for the present. We hope that the profession of Nebraska will take interest enough in it to write or see their senators and representatives and urge them to vote for it. It must be remembered that it is of no interest to those outside of the medical profession, and if physicians do not take interest enough in it to work for it, none others will. Every physician in the state ought to take enough interest in this matter to at least write one letter. And it ought to be done at once. Doctor, this means YOU.

TUBERCULOSIS AND LEPROSY AND THEIR RELATION TO STATE MEDICINE.

Much attention of late has been given to the parallelism existing between consumption and leprosy. The similarity has been insisted upon by that great authority on leprosy, Dr. Daniellsen, who is even inclined to think that the two are really one and are identical; that their bacilli are a single species, modified by environment.

Dr. Ransom has further pointed out the similarity of the diseases. He traces their relationship, first, in their specific causation and in their morphology; second, in their pathology; third, in their distribution; fourth, in their history; and fifth, in their infectiveness and hereditary transmission. Altogether, Dr. Ransom makes out a case surprisingly strong, so strong, indeed, that the profession seems to have renewed its interest in certain aspects of consumption. While in this country leprosy is not prevalent, tuberculosis is our most fatal disease, and it is ubiquitous. It respects persons, but not classes. While certain individuals are immune, yet it invades the palace as well as the hovel. If met with less frequently in the former, it is none the less deadly. Of late years it has probably been the subject of greater scientific research than any other malady. If by this investigation and comparison with leprosy a parallelism can be made out, we may be taught new lessons concerning tuberculosis. The similarity will have a wider significance than an etiological or a morphological one. Its bearing upon preventive medicine is, we believe, likely in the near future to attract much attention, the interest being as great to the laity as to the profession.

Dr. Craig, of the navy, recently addressed the National Sanitary Association on "The Municipal Control of the Consumptive," in which he referred to the similarity existing between tuberculosis and leprosy, as pointed out by recent investigators. This naturally raises the question: If the number of lepers has been decreased by state interference, why cannot consumption be checked in its ravages by proper and efficient state management? We use state in its wider significance, that of society. And society would need much education along this line before it could force those infected with tuberculosis to be torn from their friends and placed in a state of complete isolation. Even though this could be shown to be for its future good, it would avail little. As much as our ethical writers dwell upon the importance of altruism, and as rapidly as this sentiment has of late grown, it is remarkable how little we as individuals are willing to sacrifice for the future welfare of the race. Yet much might be done, short of isolation, to prevent, or at least minimize, the spread of the disease, as well as to promote the comfort of those who are so unfortunate as already to be sufferers. The latter could be largely brought about by proper food and clothing and hygienic surroundings, if for any reason the patient had not already been provided with them. But how to prevent the spread of the disease is a

Digitized by Google

more complicated question. If the recent vigorous editorials in the Medical Record reflect the sentiments of the profession, state control of consumptives is a long ways off. But, as we think, it is sure to come. Not all at once. Only by the slow process of evolution.

Many ways, short of isolation, in which the spread of the disease might be lessened suggest themselves. The most potent agency in the spread of the malady is the sputum of the consumptive. If this could be destroyed it would save from infection not only other members of the family that are not immune, but would also keep the streets, places of public meeting, as well as public conveyances, free from dust laden with the tubercle bacilli. No one can doubt that by such practice the number of consumptives would be greatly lessened. In this direction the most we can hope for at present is to educate the public. To borrow a temperance phraseology, "to use moral suasion." But there are other means of infection. Our meat and milk supplies may be the means of conveying the disease, so that our beef and milk cattle ought to be subject to official inspection. That the state will gradually extend its function in the field of preventive medicine there can be but little doubt. Meanwhile, educate the public.

A NATIONAL FEDERATION ON LEGISLATION.

It was proposed at the meeting of the Medical Society of the state of New York, held January 26-28 last, that every state medical society should send a representative or representatives to a meeting to be held at Washington annually, during the session of congress, and which should be known as the "National Federation of Committees on Legislation of State Medical Societies," the object being to secure united action on matters coming before the different state societies. The main function of such a body would be one of conference, and to unitedly try to secure national and state legislation on matters of importance to the medical profession of the nation at large. That such confederation or conference, held annually, should be of ultimate benefit to the profession cannot be denied, and while it would be expensive, probably, it certainly would be money well invested and must result in good. The medical profession of the country when united is a power, but the great trouble always has been to get it to unite. It certainly seems as though the plan proposed by Dr. Spencer, the president of the New York society, is a practical and feasible one. If representatives from the different state boards of health or boards of examiners could also meet with the representatives of state societies, it might and would be possible in time to get laws passed in all states alike. It is about time that we recognized the fact that a medical man, although thoroughly prepared and in every way well qualified for the practice of medicine, is shut out of the majority of the states, if he should wish to move, unless he is prepared to go through an ordeal of passing an examination in all the branches of medicine, yet we cannot expect those states that have good laws requiring an examination to recognize certificates or diplomas when they mean so little as they do now from so many states. Such a conference as is proposed would be a grand thing if it did nothing more than bring about the making of the same laws in every state regulating the practice of medicine, and making it so that the certificates issued by one state board of examiners should be recognized and endorsed by all the others. But this is not the only question of legislation that should be looked after. Nearly every year something comes up in congress that is liable to affect the medical profession that should be attended to. This year there is a desperate effort being made by the anti-vivisectionists looking to the passage of rigid laws forbidding in any way experiments on animals. Laws affecting public sanitation, the standing of the profession in the army and navy, the various questions that come up in the different state societies, or before different state legislatures, could all be pushed forward by such a body.

THE BUBONIC PLAGUE.

It may be thought that a discussion of the terrible plague that is devastating China and India at the present time may be an impracticable subject in a medical journal in the central part of the United States. But when we read that this so-called bubonic plague has developed in two persons in London, and when two cases have already occurred on Pacific Mail steamers on their way from China to San Francisco,—two Chinese stokers being stricken and dying of the disease,—then we may begin to realize that it is possible, though not probable, that America may feel its blight. We are exposed on two sides. It may reach us by the Golden Gate from China, and it may enter almost any of the Atlantic ports from any of the ports of Europe. What this so-called bubonic plague is, it is hard to tell from any description that has thus far been attempted. Dr. Cantlie,

Digitized by Google

in the Medcal Press and Circular of January 6, in discussing the spread of this disease, defines it as an acute febrile disease of an intensely fatal nature, characterized by inflammation of the lymphatic glands, marked cerebral and vascular disturbances, and by the presence of a specific bacillus. The disease has had various names at various times, but the word "plague" has generally seemed to be the most decidedly appropriate. It comes on very suddenly, and one stage follows another with terrible rapidity, until death ensues. It is usually ushered in with a chill, which is followed by an acute nervousness, with mental disturbance, the patient staggering like a drunken man. The fever is usually high, running from 100 to 108 degrees, with headache, burning thirst, and intense pain in the abdominal region. A sticky perspiration exudes from the pores of the skin, and then follows the glandular swelling from which the disease takes its present name, the Bubonic Disease. Just before death occurs, dark spots appear on the skin, which gave the name "the Black Death" to the disease of the terrible plagues of the past. Glandular swellings appear in the groin, neck, and arm pits, which are of oval, egglike shape. These are accompanied by sudden darting pains throughout the body. Dr. Cantlie believes that the term "bubonic," so frequently applied to the disease, is not so appropriate as would at first sight appear. The bubo is essentially the swelling of a gland, caused by the entrance of septic materials in the track of lymphatics over which the gland presides. This cannot be said to obtain in this plague, for the so-called bubos can in no sense be regarded as a sympathetic swelling, but merely the outcome of a blood poison. One peculiarity of this disease is that rats, snakes, and other animals are affected as readily as the human being. In India, as in China, the evidence of the plague was heralded by an epidemic among rats, which were found dead by the hundreds in and about the native dwellings. In some instances rats, evidently suffering from the disease, swarm, swollen and dying, into the very rooms where human beings live; they reel and wander and stagger aimlessly about, as though in the same delirium which marks the disease in certain stages in man.

The epidemic as it now exists in Bombay shows little signs of decrease, notwithstanding the precautions adopted by the local authorities. Without doubt the plague is the result of poor hygienic surroundings, or rather is a filth disease which nearly always follows, or is accompanied by, want and famine. Whether these accompaniments of the disease in the past have had anything to do with the production or spread of the disease, or whether they were pure coincidences, it is hard to tell. The terrible Black Death, which in 1665 killed over one hundred thousand people in London, followed immediately after the great fire of that year. But whether the suffering, want, and privation resulting from the fire had anything to do with the spread of the disease is very doubtful. The history of the horrors of that year as described by De Foe would make us think that the plague was the result, indirectly, of the fire and its results. We read gruesome descriptions of the sickness, mourning, and desolation which prevail at Bombay; the streets are deserted, the stores closed, and business generally suspended. The difficulties of disposing of the dead add to the horror, and the terror of the native medical men makes them useless at this trying time, for they refuse to visit or touch the sick, for fear of contracting the disease.

DR. O. GROTHAN, senator from Howard county, and chairman of the senate committee on medical legislation, has sent the following letter to a large number of the physicians of the state. It is hoped that his appeal will be answered. The bill is a good one, and every effort on the part of physicians should be made to have it pass:

LINCOLN, NEB., February 10, 1897.

DEAR DOCTOR: As you have perhaps noticed, there is in the legislature pending a bill looking to the elevation of the standard of the medical profession in our state. This is simply a measure to place the law governing the practice of medicine in Nebraska on a level with the majority of her sister states. Nebraska stands at the head in other educational matters, why should she lag behind thirty other states with respect to the qualification of her physicians?

The bill now before the legislature provides for a law to raise the graduation requirements from three to four years. As our Nebraska medical colleges have these requirements now, and are in favor of this act, it would not be treating them fairly to allow graduates from two and three-year colleges to impose their "contents" upon us.

The second and main provision of this bill is the establishing of an examining committee from each of the three "schools" of practice, for the purpose of examining all applicants to practice medicine in this state. This, of course, will only apply to those who shall commence to practice after this act takes effect, and has nothing to do with physicians now registered under the old law.

As the medical law now stands upon the stat-

Digitized by Google

utes, Nebraska is the dumping ground for the so-called doctors who fail to pass the regular examinations in other states. For instance, eleven applicants out of twenty failed some time ago in the state of Washington to pass and obtain license to practice in that state; but these same eleven can, if they choose, come to Nebraska, and we must receive them with open arms as regular qualified practitioners. The present law permits these so-called "doctors" full sway to impose their ignorance upon the people of this state, without let or hindrance. This is true, that not only the majority of our own states turning loose the offal of their medical profession upon us, but also true of Europe and Canada; and thus the lives of our citizens are jeopardized at the hands of these tyros of medicine.

The provisions of the measure now pending are fair alike to all schools of medicine, and I feel sure it will have the hearty support of every conscientious physician of the state.

Now, doctor, you are surely as much interested in this matter as any of us, and I want you to at once write the representatives and state senator of your district and ask them to support this important measure. The bill is Senate File No. 236, by Mr. Lee. (Give number when you write.) You must not fail to attend to this.

Hoping to see you at the next meeting of our State Medical Society, I am,

Fraternally yours, O. GROTHAN.

Notes and News.

DR. I. J. M. GOSS, of Marietta, Ga., died last month.

DR. H. A. ABBOTT has removed from Waterloo, Neb., to Omaha.

TO INDUCE labor, Kossmann advises the injection of five grams of glycerin within the cervix.

THE physicians of Denver are starting a movement to have the A. M. A. meet in that city next year.

DR. A. D. BEVAN, of Chicago, has resigned the position of chief surgeon of the Iowa Central railroad, and Dr. H. L. Getz, of Marshalltown, Ia., has been appointed in his place.

THE latest idea for the enterprising and ambitious physician, who is desirous of "getting on in the world," is to go to sleep in church. He can't help it; worked to death, poor fellow.

DR. F. D. HALDEMAN, the secretary of the State Board of Health, and president of the State Medical Society, is taking a four weeks' course at the Post-Graduate Medical School of Chicago.

DR. HOWARD A. KELLEY has in press a treatise on gynecology, on which he has been at work for some time. From the popularity of the author, and his reputation as a gynecologist, the book ought to take well.

DR. THOMAS A. EMMET has sold his collection of American historical material to the New York library for $150,000.

THE American Medical Review states that by the will of the widow of Dr. Watson Carr, the Presbyterian Hospital of Chicago receives a handsome donation to erect an annex, to be called the "Dr. Watson Carr Memorial."

THE oldest practicing physician in America is said to be Dr. C. F. H. Wilgohs, of Doylstown, O., who is ninety-three years of age, has the appearance of a man of sixty, eats three meals a day, and is still practicing medicine.

A BILL has been introduced into the Colorado legislature amending the old medical law. The main feature is to require all physicians to be graduates of reputable medical colleges before they can be admitted to the board for examination.

THERE ought to be a good supply of medical men in St. Louis the first week in April. The Tri-State Medical Society of Iowa, Illinois, and Missouri will meet there on the 6th, 7th, and 8th, and the Western Ophthalmological, Otological, etc., Association meets there on the 8th and 9th.

THE State Board of Examiners of New York, in a report made to the Medical Society of New York two weeks ago, states that since the establishment of the board, in 1893, 2,832 persons had applied for license to practice medicine, and of these 927, or 29.7 per cent., had been rejected as incompetent. Query: Where did these 927 go?

THE next meeting of the Medical Society of the Missouri Valley will be held in Lincoln, March 28. The meeting promises to be a large one. Lincoln being a railroad center, physicians from all parts of the great Missouri valley will find this meeting easy of access. The Missouri Valley is becoming the most practicable and profitable of all the seminational societies.

THE Nebraska State Medical Society will meet in Lincoln on May 18, 19, and 20. While that is several weeks ahead, it is not too long for those who take an interest in it to begin to prepare their papers. According to a resolution adopted at the last meeting of the society, the meeting this year will be held in two sections, one designated surgical, the other medical. For this reason nearly twice the amount of work can be accomplished, and there will be no danger of too many papers.

THE Denver Clinical and Pathological Society appointed a committee to confer with the Bar Association in regard to the adoption of a rule of procedure as to the disbarment of attorneys who participate in blackmailing suits. This action was brought about from the fact that one of the physicians of Denver, Dr. W. W. Grant, was being sued for malpractice, when it was evidently simply a blackmailing scheme. At the same meeting a committee was appointed to investi-

Digitized by Google

gate the feasibility of forming a protective association to defend physicians against blackmailing suits.

IT is not often that we come across anything which shows the appreciation of the laity like the following, from the bishop of Norwich, England, taken from one of his sermons: "Nor can I, nor shall I, be silent about the wrongs to which scores of medical men are subject. I refer to the startling contrast there is between the inexorable demands which society makes on medical men and the elasticity of the social conscience with respect to his remuneration. I have known cases where they are summoned at all hours and all seasons of the year. Their bills are presented with timidity, if not anxiety, and they are sometimes received with amazement, sometimes with indignation, and sometimes relegated to oblivion. Nor are cases unknown where the righteous demand for work done is met by calling in another practitioner; he, in turn, to suffer as his brother did before him. I cannot permit myself to imagine that I address any such wrong-doer here to-day. But if I do, then, in my Master's name, I entreat you to remember that the medical men of this nation are the highest type of their class in the world; they are entrusted with the secrets of domestic life; they have all our liabilities of their order; they frequently die as martyrs to science, to suffering, to sympathy, to destitution. Believing this, my plea is that every unpaid medical bill be discharged generously, gratefully, cheerfully, and that whatever account must be deferred in payment, the last to be deferred is the account of him who is the human agent who has brought us into the world, enables us to continue our work in life, and many a time lays down his own in endeavoring to baffle death."

Miscellaneous.

IN OPIUM POISONING.—Permanganate of potassium may only be given by the stomach as a strictly chemical antidote. Recalling that opium and its derivatives are eliminated into the stomach to be reabsorbed again, it is in order to administer this agent at any time. The dose should be grain for grain for morphine, and six grains of permanganate in six ounces of water for one ounce of laudanum. Lavage, with a weak permanganate solution, practiced hourly afterward.

ONE OF EUGENE FIELD'S GEMS.—The following beautiful poem is going the rounds of the medical press, and we cannot resist the temptation to pass it on. We do not remember ever hearing it recited at any of the Eugene Field church entertainments that were so fashionable a little while ago, yet it is more sweet and "touching" than many of his productions that are so popular for fair elocutionists. One of our contemporaries asserts that Field said that once when his wife took his little boy away on a visit, he found in their absence that he could not sleep till he got up and poured hot water on his shirt, but we do not believe this.

When Willie was a little boy
  Not more than five or six,
Right constantly he did annoy
  His mother with his tricks.
Yet not a picayune cared I
  For what he did or said,
Unless, as happened frequently,
  The rascal wet the bed.

Closely he cuddled up to me
  And put his hands in mine,
Till all at once I seemed to be
  Afloat in seas of brine.
Sabean odors clogged the air,
  And filled my soul with dread,
Yet I could only grin and bear
  When Willie wet the bed.

'Tis many times that rascal has
  Soaked all the bed-clothes through,
Whereat, I'd feebly light the gas
  And wonder what to do.
Yet, there he lay, so peaceful like;
  God bless his curly head;
I quite forgave the little tyke
  For wetting of the bed.

Ah me, those happy days have flown,
  My boy's a father too,
And little Willies of his own
  Do what he used to do.
And I, ah, all that's left of me
  Are dreams of pleasure fled;
Our boys ain't what they used to be
  When Willie wet the bed.

Had I my choice, no shapely dame
  Should share my couch with me,
No amorous jade of tarnished fame,
  No wench of high degree;
But I would choose and choose again
  The little curly head
Who cuddled close beside me when
  He used to wet the bed.

October 19, 1895. —Eugene Field.

SOME HINTS AS TO THE TREATMENT OF "COLDS."—Dr. Herbert B. Whitney, of Denver, has an article in the Medical News for January 23 on the above practical subject. As regards prophylaxis, he believes that each individual is a law unto himself; with one it is the feet, another the chest, etc. Many women are liable to cold whenever they wash the hair. There are many facts of common observation which may be emphasized. In the first place, the general hardening process practiced by the European peoples is unquestionably a prophylactic factor of the greatest utility. In early childhood this may be begun by following the daily bath with a cold sponge effusion. The author's own plan is as follows: The room being at a temperature of about 60 or 65 degrees F., two or three minutes is spent at the bowl in the toilet of the hands and face. During this time the naked body is exposed—beneficially, the author thinks—to the slightly chilling atmosphere of the room. This is followed by a quick shower bath of practically the temperature at which the water comes from the hydrant. A vigorous rub, continued only until the skin is dry, leaves the body warm and glowing. It is to this daily exposure that he

Digitized by Google

attributes comparative freedom from colds of late years.

Another fact of prophylactic interest is generally recognized, that is, colds rarely follow exposure during exercise or immediately afterward. It is only after certain degrees of cooling has taken place that the danger begins. If exercise is resumed before there is any sensation of chilling, a cold will almost invariably be avoided.

When a coryza is threatened, or even already established, it may, if taken early, frequently be aborted. This may be done by both general and local treatment. The value of quinine in certain cases can scarcely be doubted. It must be taken within the first twelve hours, and to the quantity of at least ten grains, in single or divided doses. Personally, the author says that he rarely advises it, on account of the disagreeable physiological effect of the drug. Some cases are favorably influenced by diaphoresis; for example, where the patient can remain indoors or at home on the following day, and especially, in addition to the catarrhal symptoms, there is some little febrile movement and myalgia, he adopts the following procedure: Ten grains each of Dover's powder and phenacetin are put into four capsules. Two of these are given at once and the patient remains for about ten minutes in a hot bath. He then takes a hot lemonade or rum punch and gets between several thicknesses of heated blankets. In half an hour the second two capsules are given, unless perspiration is abundant. Such perspiration should continue for an hour, after which the skin is slowly dried and the patient retires for the night to a comfortable bed.

But few people want to go to this trouble. For those who are able to be up and about there are two remedies, either of which offers a very considerable prospect of quick relief. The first is the tincture of euphrasia officinalis; ten drops of this every ten or fifteen minutes for two or three hours will sometimes almost completely dissipate the headache and the uncomfortable sensation of stuffiness and frontal pressure so characteristic of acute nasal catarrh. The second remedy is gelsemium sempervirens. The action of this drug upon the first and second branches of the trigeminus is well known, and it is probably through its effect upon the nasal branches of the ophthalmic nerve and of the ganglion of Meckel that it exercises an abortive influence. It may be given at the outset with a single dose of twenty drops of the tincture, or the same quantity may be added to half a tumbler of water, and of this a teaspoonful be taken every ten minutes for two or three hours, or until diaphoresis results.

Later, when the coryza has progressed to the stage of abundant discharge, the author recommends atropin, in doses of one-sixteenth of a grain once or twice daily.

Local applications in the form of inhalations are more popular, more convenient, and, perhaps, on the whole more useful than any of the remedies hitherto mentioned. An old and familiar combination is the following:

℞	Acidi carbolici	ʒ j.
	Spts. vini. rect.	ʒ iij.
	Liq. ammon. caust.	ʒ j.
	Aqua dist.	ʒ ij.

M. Sig.—For frequent inhalation.

This mixture will undoubtedly afford considerable relief, but it is not to be compared in general efficiency with others given below.

During the first two or three days of a coryza the most useful of all preparations employed by the author is a snuff, as follows:

℞	Cocain hydrochlor	gr. ijss.
	Menthol	gr. iv.
	Acidi borici	ʒ ss.
	Pulv. caffeæ	gr. viij.

M. Sig.—Snuff. (Coupard.)

Of this a small pinch is directed to be taken in each nostril every two or three hours. This may also be used with benefit after there is an abundant catarrhal secretion. It may, with advantage, be combined with the internal use of gelsemium, or later with atropin. [This prescription should not be written out and given to the patient, even though the words, "Do not refill," are written on it. There is too much danger of producing the cocaine habit. Ed. W. M. R.] Another good method for the local use of menthol has recently been strongly urged by Dr. Wunsche. He prescribes the following:

℞	Menthol	ʒ ss.
	Chloroformi	ʒ v.

M. Sig.—Inhalation.

At the first indication of coryza, four or five drops of this are rubbed over the palms of the hands, the latter held like a cone over the nose and mouth, and a few deep inhalations are taken. It is recommended that these inhalations be repeated two or three times in the course of the following day. Camphor is another drug that has long borne a well-deserved reputation as being serviceable in this disease.

At Bamberger's clinic, in Vienna, the routine treatment in the first stage of coryza is this snuff:

℞	Camphor trit.	aa ʒ ij.
	Sacch. alb.	

M. Sig.—A small pinch in each nostril every two hours.

The author also uses the following: The patient is directed to put an ounce of powdered camphor in a shaving mug and to fill with boiling water; a cone of stiff paper is then arranged to fit over the mug and to cover the face, and the fumes are thus inhaled for twenty minutes every two or three hours. Here, again, the fault of the method lies in the fact that it is too troublesome; for a "simple cold" people demand a simple remedy, and anything else is regarded with disfavor from the start.

Digitized by Google

During the state of exudation, it is the author's personal belief that local treatment is of little benefit. If a remedy is desired, nothing is better, and at the same time more simple, than a snuff of alum, one part to ten of powdered sugar or boric acid.

Correspondence.

WHAT OF THE FUTURE?

CHICAGO, January 22, 1897.

Editor Western Medical Review—DEAR SIR: I note an excellent editorial in your journal (January 15, 1897) entitled "What of the Future?" anent the hospital, dispensary, and college distemper that is afflicting the profession. There are several remedies that might bring about a better state of things.

1. Medical college endowments, putting our schools above the necessity of "doing business" with students—prospective or actual. This remedy may one day be practicable—at present, our influence upon the public does not reach the purses of the wealthy. We are not business men, and rich men do not care to turn the tide of their generosity toward medical schools.

2. Let reputable physicians refuse to serve on hospital staffs without remuneration. Give us a professional "union," if necessary, to accomplish this.

3. Let each physician have his own free clinic and advertise it. We all have dead-beats who had rather settle than come during our "hours for the poor." We all have poor patients enough to form a nucleus for a free clinic. Some may say this plan is not "ethical." It has been so considered by some of our most famous British physicians. What is right for a corporation is equally right for an individual doctor. Give us less ethics and more horse sense. Never mind the "pigs in the clover." Of course they don't want the other fellow to break in—oh, no.

4. Let the general practitioner boycott every man who runs a public college clinic or serves gratuitously in public hospitals. Let him, rather, support the men who have private hospitals and clinics, and who do the profession good in a financial way, and who do not lower the respect of a selfish public for the medical profession. Let the general practitioner remember that the man who gets well paid for the cases sent to him is the man who is the bone and sinew of the prosperity of the entire profession.

The foregoing may seem peculiar as emanating from a college professor, but it is the more sincere.

Very truly yours.

G. FRANK LYDSTON, M. D.

Dr. Lydston's "remedies" are all right as far as they go, but the trouble is they do not go far enough. Endowment of medical colleges would not necessarily lessen their number, or the number of students. Give us fewer colleges and better ones and, at the same time, place the examinations in the hands of those separated from the teaching body. The multiplicity of medical colleges, in large as well as small towns, simply multiplies the temptation for those to enter them who, without this temptation, would not think of going into the study of medicine. The young—or old, for that matter—man or woman sees at his door a medical college. He sees around him men—physicians—who seem to be making a good living easily. He does not know that the majority of these illustrate the phrase, "Appearances are deceitful." He knows that it will not take long for him, after entering that door, to bring through it a diploma that will give him the right to practice medicine, in some states, at least. All that will be required of him is to pay a little fee, put in the time, and the diploma is awarded him. Let us make it necessary for him to prepare himself to pass an examination before he can practice medicine, aside from having that diploma, and then he will realize that something else will be required besides sacrificing a little money and a few months of his precious time. The United States is the only one of the leading nations of the world where the teaching body has the right to grant a certificate or a diploma that will entitle the holder to practice medicine. One by one the different states are following the lead of enlightened Europe in this matter, and the sooner all the states fall into line the better it will be for the profession.

The other remedies sugested by Dr. Lydston are all right, but alas! are impractical at present.

POST-GRADUATE WORK IN CHICAGO.

CHICAGO, ILL., February 4, 1897.

To the Editor: Your request for an expression of my views and experience in reference to post-graduate work in Chicago has caused me to undertake the somewhat difficult task of writing upon a subject with which I am as yet very imperfectly acquainted. Recent discoveries have made great and radical changes in medical and surgical methods, and a man whose medical education ended ten years ago is unacquainted with medicine and surgery within the present meaning of those terms.

Post-graduate medical instruction is for the purpose of furnishing a means of refreshing our knowledge on subjects not well understood a few years ago. We are also enabled to take up special lines of work in which we have found by experience we need further light. Again, if one desires to further qualify himself to take up a specialty,

Digitized by Google

the opportunities are equally advantageous. The Chicago post-graduate schools, in my opinion, offer equal, if not superior, advantages to those of New York city. A few years ago I took a course at the New York Polyclinic, and therefore feel competent to pass an opinion. The classes, it is true, are much larger in New York, but the opportunities for seeing important operations are not so good as here. At the West Chicago Post-Graduate School and Polyclinic we have from eight to nine clinics daily, except Sunday. The different departments are well supplied with material, and an opportunity is given to study each case, under a competent instructor. Here we become familiar with the proper use of the phonendoscope, ophthalmoscope, otoscope, laryngoscope, etc. All operations performed are bulletined each morning and lectures are given evenings. The class has access to the clinics and autopsies held at the Cook County Hospital and College of Physicians and Surgeons. Complimentary tickets of admission to the clinics held at Rush are easily obtained. I have been here three weeks, and find in looking over my notes that during this time I have seen seventy-nine surgical operations. In almost every case I was near enough to the operator to closely observe the work done and to follow each step in the operation. In operations for hernia the method almost universally adopted has been either the Bassini or a modification of it. The same applies to the Schroeder cervix operation. I have witnessed two Shady operations for varicose veins. The operation, as you know, consists in dissecting out the enlarged veins after a circular incision has been made around the limb and a cuff turned back each way. The incision extends entirely around the limb and divides all the tissues down to the muscles. The wound is accurately approximated and in both cases there has been a good result.

Dr. Steele came near losing a patient under chloroform anesthesia last week. The patient, a young man twenty-three years of age, was given chloroform to have a carbuncle curetted. At the completion of the operation, respiration suddenly ceased, which was followed in a few seconds by a weak, threadlike pulse. The usual restorative measures were employed, with no appreciable effect. As a last resort, and after diligent and vigorous efforts had been made for at least five minutes, tracheotomy was performed. There was slight hemorrhage and upon opening the trachea there was a quick gasp and respiration immediately began. The tracheal wound was closed and no further trouble experienced. The patient fully recovered, but was curious to know what made his throat so sore. The peculiar feature in this case was the failure of respiration before the pulse.

Professor Senn returned to the city last Monday, and his appearance at Rush that afternoon was greeted with a flattering demonstration by the students and visiting doctors. In his opening remarks he informed us "that his trip south" (no one seemed to know where he had been) was made for the purpose of recreation, and to also afford him an opportunity of becoming better acquainted with his southern colleagues. He visited their colleges and was much surprised at the good work done, considering the inadequate course of instruction given. While there he, of course, said a good word for Rush, and felt sure that many of those in the south would in the near future come north for post-graduate work and instruction. While away he incidentally wrote his presidential address to be delivered at the next meeting of the American Medical Association. The hour was taken up in demonstrating, upon the cadaver, amputations of the hand and arm. In speaking of amputations of the hand, he alluded to the Abyssinian custom of cutting off the right hand and left foot of prisoners taken during the late Italian war with that country. An instance was related where 1,500 prisoners were taken and this terrible punishment inflicted upon every one of them. The hand was firmly grasped and by three sweeps of the knife severed at the wrist. The left foot was amputated in a similar manner, but with greater difficulty. No effort was made to control the hemorrhage or protect the wound from infection. The unfortunate victim was allowed to plunge the stumps into a vessel of boiling oil, or not, as he chose. Many of them crawled away and ended their existence by drowning. Out of the 1,500 there were 500 who survived, and of those who made their way back to Italy, 141 had reamputations performed, and of these all recovered and had useful limbs. In view of the large per cent. of recoveries under the above circumstances, we are encouraged to never sacrifice a limb if there is a possibility of saving it. I find that space will not permit further mention of the work being done here. Thorough and strict antiseptic precautions are generally observed at the hospitals I have visited. The new and scientific way of treating all wounds antiseptically is here well understood and practiced. "All surgeons who understand antiseptic wound treatment work antiseptically."

Yours very truly, F. D. HALDEMAN.

Society Proceedings.

MEDICAL SOCIETY OF THE MISSOURI VALLEY.

The next meeting of the Medical Society of the Missouri Valley will be held at Lincoln, Neb., Thursday, March 18, 1897. Please send title of paper on or before February 25, 1897.

DONALD MACRAE, JR., M. D., Secretary,
Council Bluffs, Iowa.

THE fifth annual meeting of the Tri-State Medical Society of Iowa, Illinois, and Missouri will meet in St. Louis, April 6, 7, and 8, 1897. A large

Digitized by Google

number of valuable papers will be read. Dr. Joseph Price, of Philadelphia, will hold the surgical clinic, Dr. James T. Whittaker, of Cincinnati, the medical clinic, and Dr. Dudley Reynolds, ophthalmic clinic. Dr. G. Frank Lydston, of Chicago, will entertain the members with an original story during one of the evening sessions. The officers are A. H. Cordier, M. D., president, Rialto Building, Kansas City; Hugh T. Patrick, M. D., first vice president, Chicago; H. C. Eschbach, M. D., second vice president, Albia, Ia.; G. W. Cale, M. D., secretary, 4403 Washington boulevard, St. Louis; C. S. Chase, M. D., treasurer, Waterloo, Ia. The preliminary program will be published in the next issue.

THE Western Ophthalmological, Otological, Laryngological, and Rhinological Association will meet at the Planters' Hotel, St. Louis, Missouri, April 8 and 9, 1897. The address of welcome will be delivered by Dr. W. J. Langan, president of the St. Louis Medical Society, and Dr. A. C. Corr, president of the Illinois State Medical Society, will make the response. Dr. Adolf Alt, St. Louis, Mo., will take for his president's address the subject, "Hemorrhagic Glaucoma." The railroads have promised one and one-third fare. When buying tickets ask for a certificate. On reaching St. Lousi have it signed by Dr. Alt.

Papers will be read by the following: Dr. Norval H. Pierce, Chicago, Ill.; Dr. George F. Suker, Toledo, O.; Dr. George E. Bellows, Kansas City, Mo.; Dr. Ellet Orrin Sisson, Keokuk, Ia.; Dr. John Johnson Kyle, Marion, Ind.; Dr. S. S. Bishop, Chicago, Ill.; Dr. Dudley S. Reynolds, Louisville, Ky.; Dr. J. F. Barnhill, Indianapolis, Ind.; Dr. E. B. La Fevre, Abilene, Kan.; Dr. Flavel B. Tiffany, Kansas City, Mo.; Dr. W. C. Tyree, Kansas City, Mo.; Dr. J. Ellis Jennings, St. Louis, Mo.; Dr. William S. Fowler, Chicago, Ill.; Dr. F. C. Evans, Louisville, Ky.; Dr. A. S. Magee, Topeka, Kan.; Dr. Albert E. Bulson, Ft. Wayne, Ind.; Dr. B. M. Berens, Minneapolis, Minn.; Dr. W. H. Baker, Lynchburg, Va.; Dr. J. O. Stillson, Indianapolis, Ind.; Dr. B. E. Fryer, Kansas City, Mo.; Dr. J. Holinger, Chicago, Ill.; Dr. J. W. Bullard, Pawnee City, Neb.; Dr. J. Aloysius Mullen, Houston, Tex.; Dr. Robert F. Lemond, Denver, Colo.; Dr. J. Elliot Colburn, Chicago, Ill.; Dr. G. Sterling Ryerson, Toronto, Can.; Dr. Thomas F. Rumbold, St. Louis, Mo.; Dr. S. L. Ledbetter, Birmingham, Ala.; Dr. W. E. Gamble, Chicago, Ill.; Dr. A. M. Lapsley, Keokuk, Ia.; Dr. Ignatz Mayer, Guthrie, Okla.; Dr. J. H. McCassy, Dayton, O.; Dr. J. H. Johnson, Kansas City, Mo.; Dr. J. Fred Clark, Fairfield, Ia.; Dr. J. O. McReynolds, Dallas, Tex.; Dr. W. W. Bulette, Pueblo, Colo.; Dr. A. M. Howe, Wichita, Kan.; Dr. Homar M. Thomas, Chicago, Ill.; Dr. W. L. Dayton, Lincoln, Neb.; Dr. C. M. Holcomb, Winfield, Kan.; Dr. H. Z. Gill, Pittsburg, Kan.; Dr. J. D. C. Hoit, Elmwood, Ill.; Dr. Frank Allport, Minneapolis, Minn.; Dr. W. T. Grove, Eureka, Kan.; Dr. A. R. Amos, Des Moines, Ia.; Dr. C. W. Kollock, Charleston, S. C.; Dr. E. W. Ames, Canton, Ill.; Dr. George Knapp, Vincennes, Ind.; Dr. B. F. Church, Dallas, Tex.; Dr. A. E. Prince, Springfield, Ill.; Dr. K. K. Wheelock, Ft. Wayne, Ind.; Dr. Joseph A. Daniel, Davenport, Ia.; Dr. Charles H. Beard, Chicago, Ill.; Dr. C. H. Pleasants, Helena, Mont.; Dr. M. A. Goldstein, St. Louis, Mo.; Dr. P. F. Gildea, Colorado Springs, Colo.; Dr. H. G. Sherman, Cleveland, O.; Dr. William Sheppegrell, New Orleans, La.; Dr. H. Moulton, Ft. Smith, Ark.; Dr. Frank E. Sampson, Creston, Ia.; Dr. Hamilton Stillson, Seattle, Wash.; Dr. I. Cullen, Cincinnati, O.; Dr. E. W. Heltman, Toledo, O.; Dr. E. M. Singleton, Marshalltown, Ia.; Dr. F. E. Waxham, Denver, Colo.; Dr. H. W. Whitaker, Columbus, O.; Dr. J. F. Oaks, Chicago, Ill.; Dr. M. Jay Brown, Salina, Kan.; Dr. Charles E. Walker, Denver, Colo.; Dr. J. H. Martindale, Minneapolis, Minn.; Dr. F. C. Heath, Indianapolis. Ind.; Dr. Francis B. Kellogg, Tacoma, Wash.; Dr. Allen T. Haight, Chicago, Ill.; Dr. C. W. Parker, St. Louis, Mo.; Dr. D. Emmett Welsh, Grand Rapids, Mich.

LINCOLN MEDICAL SOCIETY.

The regular semi-monthly meeting was held January 12, and was called to order by the president, Dr. M. H. Garten. The first paper read was by Dr. William Green, on "Effusions and Hemorrhages Into the Cavity of the Cranium, Producing Apoplexy, as Seen by the General Practitioner." The following is an abstract by the author:

If we take as a starting point a fairly developed attack, we will find about as follows:

In response to an emergency call, we find a patient propped up in bed, looking badly in the face; eyes uncertain, pupils sometimes dilated, lids drooping; speech thick, difficulty in swallowing; one side of the face expressionless. When the tongue is put out the tip points to one side. Investigating still further, we find paralysis of the arm or leg, or both. If the patient is left undisturbed there will be a condition of coma of varying degrees of intensity. The first condition is one of shock. In this state, the pulse tells but little.

The coma, resembling that produced by alcohol, occurs at varying intervals. The temperature rises and the pulse gains in force and frequency. In this stage secondary hemorrhage may occur. If this reaction subsides on the third or fourth day, and the temperature and pulse become about normal, the danger of immediate death is past.

The grave symptoms are deepening of the coma during reaction; rapid rise in temperature and pulse; abundant albumin or sugar in the urine; rapid formation of bed sores; large hemorrhages into the ventricles may produce sudden loss of consciousness, with complete relaxation, the hemiplegic symptoms being transient.

The conditions which produce lesions of the

Digitized by Google

blood vessels play a very important part. The special factors inducing arterio sclerosis are alcohol, syphilis, and muscular exertion. Heredity influences hemorrhage entirely through the arteries. Interstitial nephritis is closely connected with cerebral hemorrhage.

Osler says: "Nothing can be more uncertain than the post-mortem appearances of hyperemia of the brain. There are no characteristic symptoms of cerebral hyperemia. It may exist in the most extreme grade without the slightest disturbance of the cerebral functions." When passive hyperemia reaches a high grade there may be dullness, torpor, and ultimately deep coma.

R. T. Eades says: "That the post-mortem appearances do not always follow a certain train of symptoms." He says again: "He questions whether there ever is or can be a congestion of the brain."

Three cases were reported, showing varying degrees of intensity of an attack.

DISCUSSION.

Dr. J. L. Greene: I do not concur in the statements of the writer that treatment in cases of brain hemorrhage is universally unsatisfactory. On the contrary, I believe that there are many cases that can be restored to comparative health and future usefulness by well-directed treatment and subsequent hygienic management. I recall the case of a young man twenty-eight years of age who suffered from a hemorrhage upon the right side, of sufficient volume to produce unconsciousness and almost complete paralysis of the left side. His trouble was caused by violent muscular exertion while exposed to the direct rays of the August sun. Six months of energetic treatment resulted in a good recovery and he remains well. In such cases the patient should be kept for many hours in the sitting position, and be given an energetic purgative at once. I prefer croton oil, or calomel and jalap. The action of the heart, which is slow, labored, and forceful, should be controlled by the judicious use of aconite or gelseminum. The use of cold applications to the head is of doubtful utility, since if it exerts any influence at all in lessening the caliber of the vessels in the membrane and cortex, it would only increase the amount of blood in the deep tissues and increase the trouble if the lesion be in the pons or other deep structure.

Dr. J. F. Hay: Nearly all the cases of apoplexy which I have observed have been inmates of a hospital for the insane and in the chronic stage of the disease. Most of them were paralyzed on the right side, but I do not know that right hemiplegia is any more likely to be accompanied by insanity than left, although I have sometimes thought so. From the statements made in the paper I conclude that the author believes that apoplexy may be caused by congestion of the brain. As I understand it, true cerebral apoplexy is due to hemorrhage,—embolism or thrombosis. Among the insane, especially in general paresis, we have what are called apopleptiform attacks, which are supposed to be caused by cerebral congestion, but no permanent paralysis follows such attacks.

Dr. A. R. Mitchell: I am glad to note that the author has not insisted upon the short neck, red-faced, "full habit" (except the habit of getting full), so frequently considered a causative relation. There is little I can add to the discussion, further than to agree with Dr. J. L. Greene that active medication, directed chiefly to the alimentary canal, is important. I have seen one case of partial right-sided hemiplegia accompanied with complete aphasia. The aphasia continued after the subject was able to be about.

Dr. J. T. Hay read a paper on

"PARANOIA." (See Page 34.)

Dr. J. L. Greene: The habit of opening the discussion of a paper by complimenting the author upon the production has become so universal that I hesitate to do so when wishing to make the statement significant. The peculiar excellence of this paper, however, commends it to all who have heard it, or who may have an opportunity to read it, should it be published. Dr. Hay's long experience in the treatment and management of patients suffering from mental diseases renders statements from him authority. For one, I am inclined to advocate a law that would incarcerate every individual suffering from this disease, for life, regardless of whether they have attempted crime. Such a law would be beneficial in a threefold way. It would prevent many crimes; it would remove the opportunity for the individual to procreate his specie and consequently his mental infirmity; it would prevent incompetent medical officers of our politically managed institutions turning loose upon the public the most dangerous class of lunatics. The confinement for life of Prendergast and Guiteau would have prevented the assassination of Carter Harrison and Garfield, and the stigma upon the fair name of the American people of having committed judicial murder upon two mentally irresponsible paranoiacs.

Dr. Haldeman, of Ord, speaking by invitation, said that he did not understand that all spiritualists were to be looked upon as insane, although the writer seemed to indicate that in his paper. Many of them may be, but he did not think all of them should be classed as such. He did not want it to be understood as being of that faith, however.

Dr. William Green spoke of a patient now in the asylum who was a marked instance of hereditary influences.

Dr. Abbott: The most marked case of paranoia, celebrated through all the courts of the state, is that of Walker, now confined in the penitentiary. This individual of eccentric habits was living a solitary life on the prairie in Dawson county, with no very near neighbors. He was fairly shrewd, earnest, and correct in his business affairs, but

Digitized by Google

conceived the idea that a neighbor intended, by purchase or otherwise, confining the limits of his cattle range. There had been no open rupture—nothing had occurred to aggravate—there was nothing but Walker's suspicion of the intention so to do. Walker came into the village of Farnam one afternoon. His neighbor was standing on the single street of the town, in conversation with some of the villagers. Without a word of warning, without anything to attract attention, Walker drew his revolver and commenced shooting, inflicting mortal wounds. Spared from the fury of a mob, he was indicted and brought to trial. Governor Holcomb, then on the bench, permitted the question of insanity, which was raised by Walker's lawyers, to be tried to a jury. The "vox populi" unitedly testified to their belief in his sanity. The medical evidence was divided, some of the physicians believing that he was sane, a majority, however, answering the hypothetical question that Walker was a paranoiac. The jury found that he was sane and he was adjudged guilty and sentenced to be hung. His attorneys, basing their plea on his insanity, sought to have the death sentence commuted from the death penalty to imprisonment for life. In the meantime Judge Holcomb, who had sentenced Walker to be executed, had become governor, to whom the application for commutation was made. Before determining to grant or deny the commutation, the governor requested the professional opinions of Dr. J. L. Greene and myself as to whether, in our judgment, from the testimony, Walker was a sane or insane person at the time he committed the murder. Dr. Greene and myself carefully read and reviewed all the testimony bearing upon this question, and gave as our professional opinions that Walker was a case of paranoia. Governor Holcomb commuted the sentence of death to life imprisonment, although the pressure for the execution of the death sentence in the community where the murder was committed was almost unanimous. Walker was transferred to the penitentiary and his subsequent history has fully demonstrated that he is an insane person and was not responsible mentally at the time he committed the murder.

Dr. Hay, in closing, said that a belief in spiritualism is a sign of insanity he did not mean to advocate. The ideas of the ordinary spiritualist, as he understood them, are entirely different from the delusion of the man he alluded to in his paper. This man had, as he believed, direct communication with spirits, and regulated his daily conduct in accordance with their advice. In his trouble at Fairbury he was warned by spirits that a mob was after him. This frightened him and by his actions he attracted the attention of people around him, and a crowd gathered, which he naturally thought was the mob he had been warned against. He became excited and tried to defend himself, and if he had been armed a homicide would probably have resulted. Dr. Hay considers a person having such ideas not only insane, but liable to become very dangerous. Cases similar to the one described by Dr. Abbott are not uncommon. The speaker had known of several in this state very much like the one mentioned, and nearly all of them have been held responsible for the crimes committed.

Board of Health Proceedings.

NEBRASKA STATE BOARD OF HEALTH.

MEMBERS—Dr. C. F. Stewart, Auburn, President; Dr. B. F. Crummer, Omaha, Vice President; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.

THE State Board of Health of Rhode Island recognizes no medical college as being in good standing which does not require the entrance qualification representing as a minimum a high school diploma, or its equivalent, as a prerequisite for matriculation; which does not possess an adequate equipment for teaching medicine; which has not the clinical departments of anatomy, physiology, chemistry, therapeutics, materia medica, surgery, medicine, obstetrics, histology, pathology, bacteriology, ophthalmology, otology, gynecology, laryngology, hygiene, and state medicine, and which does not enjoin attendance upon eighty per cent. of four regular courses of instruction, of not less than twenty-six weeks each, in four different years, and which does not exact an average grade of seventy-five per cent. on examination as conditions of graduation.

A BILL

For an act to amend sections 3, 4, 7, 8, 9, 10, 12, and 19 of article 1 of chapter 55 of the Compiled Statutes of 1895, entitled "Medicine," and to repeal sections 3, 4, 7, 8, 9, 10, 11, 12, and 19 of said article 1 of chapter 55 as now existing.

Be it Enacted by the Legislature of the State of Nebraska:

Section 1. That section 3 of article 1 of chapter 55 of the Compiled Statutes of Nebraska of 1895 be amended to read as follows:

Section 3. Said Board of Health shall, within sixty days after the approval of this act, appoint three examining committees of three members each, one committee from the so-called Regular school, one for the so-called Eclectic school, and one for the so-called Homeopathic school. One member of each of said committees shall be designated in said appointment to serve until January 1, 1898, one member of each of said committees to serve until January 1, 1899, and one member of each of said committees to serve until January 1, 1900; and thereafter, at the expiration of each of said several terms, and each for a period of three years, the said Board of Health shall appoint one member of each of said committees. Each of said committees shall be appointed only upon the recommendation of the state society of the school

Digitized by Google

from which said committee is appointed; Provided, That each member of each committee shall be a graduated physician of at least seven years' consecutive practice in this state, and shall not be connected in any way with any medical school or college; And provided, also, That if any person recommended by the state society for appointment in any of said examining committees shall, in the opinion of said board, be unfit, said board shall thereupon give notice to the state society recommending him, which shall immediately recommend some other and different person of persons, and so on until the three examining committees as above provided, shall be duly recommended and appointed.

Sec. 2. That section 4 of article 1 of chapter 55 of the Compiled Statutes of Nebraska of 1895 be amended to read as follows:

Section 4. Said examining committees shall have power, and it shall be their duty, to advise and assist said board in the performance of its duties as prescribed by this act, to summon witnesses and to take testimony in the same manner as witnesses are summoned and depositions taken under the Code of Civil Procedure, and to report said testimony to the board, together with their findings of fact and recommendations on all matters coming before said board requiring evidence for their determination, except as hereinafter provided. Said examining committee shall hold two regular meetings for the purpose of holding examinations, one on the second Thursday in January and one on the second Thursday in June of each year, and shall also hold such other meetings as the Board of Health may from time to time designate.

Sec. 3. That section 7 of article 1 of chapter 55 of the Compiled Statutes of Nebraska of 1895 be amended to read as follows:

Section 7. It shall be unlawful for any person to practice medicine, surgery, obstetrics, or any branches thereof, in this state without having first obtained and registered the certificate provided by this act; and no person shall be entitled to the certificate herein provided for unless he shall be a graduate of a legally chartered medical school or college in good standing, and shall pass a satisfactory examination, conducted by the examining committee of the school of medicine in which he or she seeks to practice, under such rules and regulations as it may prescribe; Provided, That the questions and answers of each and every examination shall be written out and filed for reference in the office of the Superintendent of Public Instruction of the state of Nebraska; And provided, also, That nothing in this section shall operate to require further examination of any physician who is now qualified for the practice of medicine in this state, and that nothing in this act shall be construed to prevent physicians residing in other states from visiting patients in consultation with resident physicians who have complied herewith.

Sec. 4. That section 8 of article 1 of chapter 55 of the Compiled Statutes of Nebraska of 1895 be amended to read as follows:

Section 8. The term, medical school or college in good standing, shall be defined as follows: A medical school or college requiring a preliminary examination for admission to its course of study in all the common branches and in Latin and the higher mathematics, which requirements shall be regularly published in all advertisements and in each prospectus or catalogue issued by said school; which medical school or college shall also require as a requisite for the granting of the degree of M. D. attendance upon at least four courses of lectures of six months each, no two of said courses to be held within one year, and having a full faculty of capable professors in all the different branches of medical education, to-wit: Anatomy, physiology, chemistry, toxicology, pathology, hygiene, materia medica, therapeutics, obstetrics, bacteriology, medical jurisprudence, gynecology, principles and practice of medicine and surgery, and especially requiring clinical instruction in the two last named of not less than four hours per week in each week during the entire four courses of lectures; Provided, That this four-year clause shall not apply to degrees granted or to be granted prior to August, 1897.

Sec. 5. That section 9 of article 1 of chapter 55 of the Compiled Statutes of Nebraska of 1895 be amended to read as follows:

Section 9. It shall be the duty of all parties intending to practice medicine, surgery, or obstetrics in the state of Nebraska, before beginning the practice thereof, to present his or her diploma to the examining committee of the school of medicine in which he or she seeks to practice, together with his or her affidavit that he or she is the lawful possessor of the same; that he or she has attended the full course of lectures and study required for the degree of M. D., according to the provisions of this act, and that he or she is the person named therein. Such affidavit may be taken before any person authorized to administer oaths, and the same shall be attested under his hand and seal, if he have a seal, and any person swearing falsely in such affidavit shall be guilty of perjury and subject to the penalty thereof.

Sec. 6. That section 10 of article 1 of chapter 55 of the Compiled Statutes of Nebraska of 1895 be amended to read as follows:

Section 10. If, upon investigation of such diploma and affidavit, the applicant shall be found to be a graduate of a legally chartered medical school or college in good standing, he or she shall then, after the payment of the fee hereinafter provided, be entitled to a medical examination by the examining committee, as prescribed in section seven (7) of this act. If the applicant pass a satisfactory examination, showing him or her to be qualified to practice, the same shall be, by the members of the examining committee which examined the applicant, certified to the State Board

Digitized by Google

of Health, which shall thereupon issue, under the signatures of each of its members and under its official seal, a certificate stating such fact; and it shall be the duty of the applicant, before engaging in practice, to file such certificate in the office of the county clerk of the county in which he or she intends to reside and practice. Such certificate shall be filed by the county clerk, and by him recorded, in a book kept for that purpose, properly indexed, to be called the "Physician's Register;" and for such filing and recording the county clerk shall receive from the applicant the same fees as are now alowed the register of deeds for recording conveyances.

Sec. 7. That section 12 of article 1 of chapter 55 of the Compiled Statutes of Nebraska of 1895 be amended to read as follows:

Section 12. It shall be the duty of each examining committee to make a full and complete record of all the acts and proceedings had before said committee, and of all the certificates granted by the board to applicants examined and recommended by said committee, together with the proof upon which such certificates were granted, and to file such record in the office of the Superintendent of Public Instruction of the state of Nebraska, in the same manner as is provided in section 7 of this act that the questions and answers of examination shall be filed.

Sec. 8. That section 19 of article 1 of chapter 55 of the Compiled Statutes of Nebraska of 1895 be amended to read as follows:

Section 19. Each applicant for a certificate by examination shall pay an examination fee of $25, of which sum $15 shall be equally divided among the members of the examining committee making the examination, and the remainder, or as much of it as necessary, to be applied to the expense incident to the work of the several committees, and the balance, if any, to the formation of a fund for the prosecution of illegal practitioners, and of any who shall or may violate the provisions of this act, as the said examining committee shall by a majority of their members decide and direct; said fund to be held by the treasurer to be elected from the said committee by a majority vote of all their members; Provided, That in all cases when it shall be necessary for the examining committees, or any of them, to take testimony, they shall receive therefor from the applicant such fees as are allowed by statute to notaries public for like services, which fees shall be applied, first, to the expense of such testimony, and the remainder, if any, to the fund above provided for; Provided, however, That in case of the failure of any applicant to pass a satisfactory examination, the money shall be held to his or her credit for a second and third examination, if desired, at any of the regular meetings of the examining committee within two years from date of first examination.

Sec. 9. That sections 3, 4, 7, 8, 9, 10, 11, 12, and 19 of said article 1 of chapter 55 of the Compiled Statutes of 1895 be and are hereby repealed.

Necrology.

FREDERICK N. DICK, M. D.

Dr. Frederick N. Dick, who died in North Platte, Neb., December 29, 1896, was born in Greensboro, Guilford county, N. C., October 4, 1842. While at school he enlisted in the confederate army. He entered the University of Virginia at the close of the war, and immediately upon graduating from this institution entered the Washington University, at Baltimore, Md., from which he graduated February 22, 1868. Upon graduating from the latter institution he established himself in North Platte, Neb., as a physician and surgeon. His residence in North Platte was continuous until the time of his death. The cause of his death was hemorrhagic tumor of the bladder (papiloma). He left surviving him a widow and five children.

Dr. Dick had become one of the landmarks of the profession in Nebraska, and his career as a physician and surgeon was successful from the beginning. He was, perhaps, longer in service as surgeon for the Union Pacific railway than any other man on the system.

Dr. Dick was absorbed in his profession and was peculiarly gifted as a diagnostician. His concentration of mind upon a difficult case was remarkable, and he has the credit of many cases cured, considered hopeless. He was excessively modest and free from sordid ambition. He was generous and considerate; innumerable acts of kindness, done by stealth, will be long remembered in his community.

In his death the profession has lost one of its brightest lights, and the community in which he lived one of its most upright and faithful citizens. Dr. Dick was a member of the Nebraska State Medical Society.

Books and Pamphlets Received.

Annual Report of the Omaha Hospital and Deaconesses' Home Association of the Methodist Episcopal Church.

Thirteenth Biennial Report of the Superintendent of the Nebraska Hospital for Insane, at Lincoln.

Gastrostomy in Hypnosis, a paper read before the Academy of Medicine of Grand Rapids, Mich., November 9, 1896. By Henry Hulst, A. M., M. D.

Scoliosis and Its Treatment by Means of Gymnastics. By Dr. T. J. Hartelius, director of the Central Institute of Gymnastics, Stockholm, Sweden. Modern Medicine Library, No. 3.

Anti-Diphtheritic and Anti-Streptococcic Serums; Their Nature, Method of Production, and Application for the Relief of Disease. By C. C. Fite, M. D. Reprint from Maryland Medical Journal.

Digitized by Google

Therapeutic Notes.

A TEN per cent. solution of ichthyol in lanolin has cured obstinate cases of ciliary blepharitis that resisted the ordinary treatment.

FOR mastitis and orchitis, says the Medical Age, the fluid extract of phytolacca, five drops in water every two hours, will prove very satisfactory.

CASTOR OIL EXTERNALLY.—Castor oil heated and thoroughly applied to the abdomen, in children, will often move the bowels as effectually as when given internally.

THE HORSECHESTNUT AS A REMEDY FOR HEMORRHOIDS.—Artault, in Revue de Thérapeutique, acting on the hint of the popular esteem in which the horsechestnut is held as a remedy for hemorrhoids, has used a concentrated tincture of the nut in twenty-one cases, and always with very striking results. He thinks it acts as a specific on the pain and has a direct and intense constrictive action on the veins of the pelvis. He gives ten drops of the tincture once a day, and finds that usually a few days' employment of the remedy is sufficient.

A WASH FOR INCIPIENT BALDNESS.—The Therapeutische Wochenschrift gives the following formula:

℞	Salicylic acid	1 part.
	Alcohol	aa 20 parts.
	Glycerin	aa 20 parts.
	Tincture of soap	aa 20 parts.
	Peruvian balsam	6 parts.
	Cologne water	14 parts.

M. Digest for fourteen days, and filter. The scalp is to be rubbed with the wash daily.

THE TREATMENT OF ALOPECIA AREATA.—Brocq in the Wiener Medizinische Blätter recommends the following prescription:

℞	Resorcin	gr. iij.
	Quinine hydrochloride	gr. vj.
	Vaseline	ʒ j.

M. This ointment is to be applied to the bald spots, but only a limited part of the surface is to be treated at one time. If the loss of hair continues, twenty drops of the tincture of cantharides may be added to the ointment, or sulphur may be employed according to the following formula:

℞	Resorcin	gr. vj.
	Quinine hydrochloride	gr. xii.
	Precipitated sulphur	ʒ j.
	Vaseline	ʒ j.

M. If this proves too irritating, a simple two per cent. ointment of boric acid may be applied after its removal. If the loss of hair is associated with seborrheal eczema, it is often well to use mercurial ointment.

A GOOD local anesthetic for spraying abscesses before lancing is made with half a drachm of chloroform in an ounce of ether.

THE following is recommended as a laxative powder for constipation in children (Therapeutic Gazette):

℞	Sodii bicarbonat.	ʒ iij.
	Rhei pulv.	ʒ ij.
	Sodii sulphat.	ʒ j.
	Olei menthæ piperitæ	gtt. xx.

M. Sig.—Half to one teaspoonful of this powder may be given in the morning before breakfast.

ANTISPASMODIC MIXTURE FOR THE TREATMENT OF THE ACUTE PAIN OF FLATULENT DYSPEPSIA.—Dr. Stephen Mackenzie uses the following:

℞	Spirit of cajuput	aa 10 grammes.
	Aromatic spirit of ammonia	aa 10 grammes.
	Spirit of chloroform	aa 10 grammes.

Mix. One teaspoonful in a wineglassful of water every half hour or fifteen minutes, until relief is obtained.

This mixture is said by Dr. Mackenzie to afford prompt relief in nearly every case of spasmodic attacks of pain, with distension of the stomach and intestines.

EGGS IN THERAPEUTICS.—The Medical Record gives the following ways of using eggs in therapeutics: A mustard plaster made with the white of an egg will not leave a blister.

A raw egg taken immediately will carry down a fish-bone that cannot be gotten up from the throat.

The white skin that lines the shell of an egg is a useful application for a boil.

White of egg beaten with loaf sugar and lemon relieves hoarseness—a teaspoonful taken once an hour.

An egg added to the morning cup of coffee makes a good tonic.

A raw egg with the yolk unbroken in a glass of wine is good for convalescents.

SANMETTO IN GONORRHEA.—Dr. A. G. McCormick, Richmond, P. Q., Canada, writing, says: "I prescribed Sanmetto in a recent severe case of gonorrhea with the greatest satisfaction. I never prescribed any remedy in such cases that acted so well. The case was one of simple gonorrhea, of a severe type—pain, burning, and scalding, with a profuse discharge. By the use of Sanmetto my patient made a rapid and satisfactory recovery. Sanmetto is a sovereign remedy in such cases. I used it two years ago in a like case with a similar result. I am well satisfied that Sanmetto is by far the surest, speediest, and safest, as well as the most pleasant and most satisfactory remedy we have for gonorrhea."

THE PRESENT PREVALENCE OF LA GRIPPE.

"The following suggestions will be of value at this season. The pains of acute influenza are something indescribable, especially when associated with high temperature. To relieve these with some preparation of opium is only to increase the cerebral congestion and aggravate the extreme prostration. Sharp, darting pains are no more severe than are the dull, heavy, and persistent pains in the muscles and bones which so often obtain in this disease. Clinical reports verify the value of antikamnia in controlling the neuralgic and muscular pains, as well as the fever. In fact, antikamnia may now be called

Digitized by Google

the sine qua non in the treatment of this disease and its troublesome sequelæ.

"It seems hardly necessary to indicate the conditions, when the use of two such well-known drugs as 'antikamnia and quinine' will be serviceable, nor the advisability of always exhibiting 'antikamnia and codeine' in the treatment of the accompanying neurosis of the larynx, the irritable cough and bronchial affections. Relapses appear to be very common, and when they occur the manifestations are of a more severe nature than in the initial attack. Here the complications of a rheumatic type are commonly met and 'antikamnia and salol' will be found beneficial. Antikamnia may be obtained pure, also in combination with the above drugs in tabulet form.

"Tablets mark the most approved form of medication, especially as they insure accuracy of dosage and protection against substitution. To secure celerity of effect, always instruct that tablets be crushed before taking."—Medical Reprints.

NEUROSINE VS. MORPHINE.

POSITIVELY NO MORPHINE IN NEUROSINE.

Neurosine is the most powerful Neurotic Attainable, quiet-never prescribe or recommend any product which the laity ing the nerves and producing natural sleep. Physicians should could obtain from the druggists to produce sleep that contains morphine. There is hardly a day but what fatal results occur (to those using atimulants to excess and other causes) who resort to neurotics to steady their nerves and produce sleep. It is hard for one to believe that Manufacturing Chemists would be so unprincipled as to compound morphine without indicating same in formula. The Dios Chemical Co., of St. Louis, Manufacturers of Neurosine, publishes the formula complete, which is composed of the following well-known and tried drugs: Chemically Pure Bromides of Potassium, Sodium, Ammonium, Zinc, Extracts of Henbane, Belladonna, Lupuli and Cascara Sagrada with Aromatic Elixirs.

CLEANLINESS IN CATARRH.

Dr. Edwin Pynchon, in an article in the Annals of Ophthalmology and Otology, calls attention to the widely varying formulæ of Dobell's Solution given by different authors, and incidentally mentions what is a really practical question in the treatment of naso-pharyngeal catarrh.

Numerous preparations are widely advertised as adapted for cleansing purposes in the nasal cavity, and are possibly of real merit, but the price asked for the product is so exorbitant that to people of moderate means the expense is a serious factor, while to the poor, it is beyond their purse, and in each case, after the prescription has, perhaps, been filled once, they cease its use, and go back to the home remedy of salt and water of varying strength, and usually with disastrous results.

The Seller's tablets, made by different manufacturers, also vary in strength and composition, and our experience has taught us that several of those on the market cannot be used without causing great smarting, and even pain.

The fluid used in cleansing the nasal cavities in both atrophic and hypertrophic rhinitis should be of about the specific gravity of the serum of the blood, and this is acquired in the solution advised by Dr. Pynchon, which is as follows:

Sodæ Bicarb	2 ounces.
Sodæ Biborat	2 ounces.
Listerine (Lambert's)	8 ounces.
Glycerin	1½ pints.
Aquæ, q. s. ad	8 pints.

One ounce of this formula added to a pint of water yields a bland and pleasant alkaline solution with a specific gravity of 1.015.

The addition of the Listerine takes the place of the carbolic acid in the original formula, and is a decided advantage, as it imparts a pleasant taste, and is quite as efficacious as the acid.

The common use of Listerine and water should be superseded by the addition of the alkaline solution given, and in the preparation thus made, we have all the advantages of any cleansing agent, and it can be furnished at a price commensurate with all pockets.—Atlantic Med. Weekly.

IMPERIAL GRANUM.

SYRACUSE, N. Y., December 11, 1896.

John Carle & Sons, New York City:

SIRS—During the middle of November I had an attack of pneumonia, with very great difficulty in digesting my food; on trial of the various foods of which I had an abundance of samples, I found none so palatable and easily digested as Imperial Granum.

Truly yours, ——— ———, M. D.

CAPITAL HOTEL

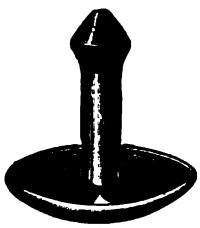
LINCOLN, NEBRASKA.

R. W. JOHNSON, Proprietor. *Rates, $2.00 Per Day.*

Don't be Caught Napping

ADOPT

RYMAN'S CERVIX MEDICATORS



NO. 195

With them you can benefit numerous female patients, make staunch friends, and increase your revenues. Send me $4.00 and refer to this offer, and I will send you at once, prepaid, six assorted sizes of these faultless stems with applicators and printed instructions, or one only for $1.00. I spin them hollow out of a single piece of aluminum, making a feather-weight but strong stem that is strictly aseptic and will remain in situ. Order at once.

H. M. RYMAN,

51 & 53 Maiden Lane. *New York City.*

ELECTRO
THERAPEUTICS
...CATALOGUE FREE...
McINTOSH BATTERY & OPTICAL CO.
No. 533
CHICAGO.

NATIONAL AND STATE MEDICAL SOCIETIES.

American Medical Association—Meets at Philadelphia, June 1–4, 1897.

International Medical Congress—Meets in Moscow, Russia, August 19–26, 1897.

Colorado State Medical Society—Meets at Denver, June 15–17, 1897. H. B. Whitney, secretary, Denver.

Iowa State Medical Society—Meets at Marshalltown, May 19–21, 1897, J. W. Cokenower, secretary, Des Moines.

Kansas State Medical Society—Meets at Topeka, May 12 and 13, 1897. G. A. Wall, secretary, Topeka.

South Dakota State Medical Society—Meets at Mitchell, June 9, 1897. W. J. Maytum, secretary, Alexandria.

Western Surgical and Gynecological Association—Meets at Denver, Colo., December 28–29, 1897.

OFFICERS—President, Joseph Eastman, Indianapolis, Ind.; first vice-president, D. S. Fairchild, Clinton, Ia.; second vice-president, B. B. Davis, Omaha, Neb.; secretary and treasurer, Herman E. Pearse, Kansas City, Mo.

EXECUTIVE BOARD—Lewis Schooler, Des Moines, Ia.; M. B. Ward, Topeka, Kan.; C. L. Hall, Kansas City, Mo.; T. J. Beatie, Kansas City, Mo.; J. P. Lord, Omaha, Neb.

Medical Society of the Missouri Valley—Meets at Lincoln, Neb., March 18, 1897. Donald Macrae, Jr., secretary, Council Bluffs, Iowa; president, H. B. Lowry, Lincoln.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL II. No. 3. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. MARCH 15, 1897.

Original Articles.

SOME ABUSES OF THE CURETTE IN GYNECOLOGY.*

BY W. H. CHRISTIE, M. D.,
OMAHA, NEB.

One of the dangers to the medical profession is to follow the fashion, making the practice an art of doing and less a science, i. e., less why and when to do to secure the best results. The almost universal and artistic use of the curette in gynecological practice in the treatment of diseases of the endometrium may be cited as an illustration in point. This is, we believe, bad practice. This is another case where there is nothing in a name. Conditions of the patient, the surroundings, as well as the character, the stage, and the condition of all factors which enter into the difficulty,—the extensiveness, the virulence of the invasion, the condition of the lymphatics leading from the endometrium, the circulation in the parts and the nervous system, especially the sympathetic, which may or will modify the vaso-motors, and, through them, the quantity and quality of the blood flowing to and through the uterus and the tissues contiguous to it, and receiving their blood, nerve, and lymphatic supply from the same common symptoms.

Injured peripheral nerves to the endometrium must, of necessity, modify the nerve influence to all tissues, whose nerve supply is derived from the same common center that they are. The vasomotors will all be disturbed that are most intimately connected with the ganglionic centers that those of the endometrium are, and the blood vessels will be correspondingly influenced, and nutrition be correspondingly modified, and congestion, stasis, exudation, and these, in turn, will modify the function of the nerves by the disturbance of their nutrition and the pressure upon the peripheral sensory nerves, causing pain and thus increasing the irritation, in addition to the original provocative cause.

The lymphatics passing up the broad ligaments, laden with septic material gathered from the endometrium, and carrying it to the lymphatic glands, which may have arrested, as sentinels, the rapid distribution of it, but, by increasing the irritation of the endometrium, do we not increase congestion, stasis, and exudation, and are not these glands as so many police stations overcrowded with criminals, to be overcrowded with the germs, and further infection results by their escape and infection of new areas of tissue? Is it not for these reasons that, after undue irritation from an untimely curetting, we have this system unduly full, and increased numbers of enlarged lymphatic glands, great increase of tenderness and rise in temperature, and later pus centers, abscesses? It is for these reasons that a reaction has arisen against the indiscriminate use of the curette in disease of the tissue. It has proven a mistake, and that, too, of a serious import. It illustrates but another phase that any measure that has the power of accomplishing good has its limitations for the same, and may do equally as much harm when the conditions are not properly interrogated and interpreted that call for its use or, maybe, rejection.

Inflammation having existed sufficiently to have caused great diffusion of tenderness, with exudation, characterized by tenderness, hardness, and increased local heat, and, perchance, adhesions and a fixedness of the uterus, in my judgment, most emphatically denies the use of the curette, as well as enlarged tubes and ovaries. To illustrate: A specific gonorrheal endometritis, with the sympathetics already excited, the arteries stimulated, the rapid tendency to congestion, exudation, and turgid lymphatics, the curette is not called for. The conflict between the phagocytes and the gonococci is already too evenly balanced to burden Nature by wounding its already too highly wrought sensitive nerves.

How many times has orchitis been produced by the use of the sound or too strong injections or irritation from scalding urine after a debauch? The mechanism and results are the same in either case, notwithstanding some anatomical differences to suit the necessary conveniences of the sexes. Rest, with the old masters, was one of the fundamental maxims in all inflammatory processes, and the discovery of germs and their habits and development does not destroy this time-honored aphorism, but should, on the contrary, enable us the better to act as Nature's handmaids to arrive at that secure haven—rest—physiological rest, in which state Nature, by her methods, turns the tide of battle against the invaders—the germs. Have we a tubercular ovary, with tenderness and great monthly pains, there will be, from the repeated congestions, whether there exists stenosis or not of the cervix, a muco-purulent discharge from the uterine canal. This indicates a

* Read before the Omaha Medical Society, March 2, 1897.

Digitized by Google

septic condition of the endometrium. Now, shall we forcibly dilate and curette? My answer is no, underscored. Do we wish to depress Nature and permit the walled colony of the bacilli to break loose and establish other foci that may prove irredeemably destructive? Rest, as perfectly as possible, should be established. Not only rest, but nutrition to the embarrassed cells.

The use of an anesthetic, it may be said, by obliterating pain, disposes of some important factors, but the sympathetics are not as completely obtunded, and again, the anesthetic itself becomes an embarrassing feature in some of these cases, by modifying nutrition and the circulation, and frequently the temperature suddenly may arise, without marked tenderness, but more frequently with, under the most careful antiseptic precautions. The curette should no more be resorted to where these evidences are present than any other radical procedure. Physiological rest should be obtained first, as complete as possible, by free drainage from the uterus, and this should be secured by the gentlest and at the same time quickest method, and in my judgment it is best obtained by the use of the graduated series of dilators, followed with an antiseptic application, and which at the same time will have a modifying influence on the tumefaction of the tissues and is anesthetic at the same time.

Iodinii resublimate . . .	ʒ ss.
Acid. carbol. cryst. } Chloral hydrate } . .	aa ʒ j.

M. (Iodine and chloral rubbed up first and dissolved by heat.)

Sig.—Apply with an applicator. The application endorsed by Dr. Goodell. Hot water douches in large quantities twice daily, and absolute rest until all evidences of septic diffusion have ceased, when the curette may be resorted to without untoward results, whereas without such precautions there would more than likely be.

With adhesions, diseased tubes, and ovaries no benefit can be derived, as the newly curetted surface would only again be infected from that source. The curette may be used in recent puerperal sepsis as soon as the temperature rises and tenderness points to infection. The os being patent, the blunt curette can be introduced and the endometrium scraped off without much irritation and pain, and at the same time the cavity should be freely irrigated with a large quantity of water, at least a gallon of sterilized water, and, maybe, some antiseptic, as creoline or carbolic acid, one to twenty, through the handle of the curette, i. e., an irrigating curette I think preferable, and then dry the cavity out thoroughly and iodoform and boracic acid, one to seven, blown in or carried in with the gauze, as the uterus is to be packed with the same, but not too tightly. This should be repeated twice or three times daily, depending upon the character of the temperature.

In these cases, if there is too much tenderness or soreness to use the curette as indicated, then simple douching, in from one to three gallons at a time, as before, and carry gauze and the powder as before. These are some of the thoughts that I have hurriedly jotted down that should guide us in the use of the best, and yet maybe the worst, means of treating this diseased tissue when the cases are not properly selected.

THE STRUCTURE AND FUNCTION OF PERITONEAL ENDOTHELIUM.

By BYRON ROBINSON, B. S., M. D.,
CHICAGO, ILL.

The immortal Bichat established the independence of the peritoneum as to structure and function in 1800. His works were issued twenty years after his death, which occurred at 32 years of age. Little progress was made in any practical knowledge of the peritoneum before 1850. The best short anatomical treatise on the anatomy of the peritoneum was written in 1844 by Professor Huschke, and none superior, except in length, has since appeared. Luschka wrote a small monograph on serous membranes in 1851. The Meckels, father and son, said excellent things about the peritoneum, as did Lauth, Bouen, Baer, Wolf, and Pander. Pinel cleared up many a dark cloud when he discovered the endothelium of the peritoneum. Then came along that prince of anatomists, Henle, whose sharp eyes saw that the essential element of the peritoneum lay in its endothelium. Eighteen hundred and sixty is the real starting point of our microscopical knowledge of the peritoneum, when Recklinghausen discovered his classical method of demonstrating the outlines of the peritoneal endothelium by the use of $AgNO_3$. Recklinghausen labored with un-

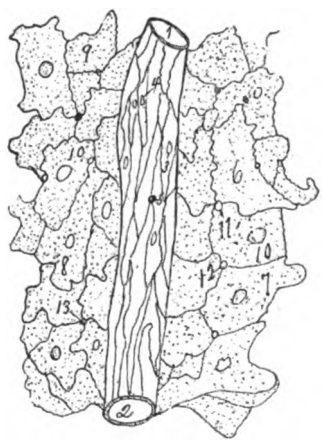


FIG. 1.—Drawn from peritoneal side of a rabbit's centrum tendineum to illustrate a small capillary distinctly invaginated in the vast lymph spaces through which it courses. The diaphragm was silvered and the simple handling of the diaphragm during an experiment sufficed to desquamate the free peritoneal endothelia so that one can readily see the blood vessel with its long spindle-shaped endothelia coursing through the vast lymph field, recognized on each side by their sinuous endothelia. The lymph spaces pass over the blood vessel, but that is only to avoid confusion of endothelia 1, 2, blood vessel; 3, 4, its nuclei; 5, stoma verum; 6, 7, 8, 9, sinuous endothelia of the lymph spaces; 10, 10, their nuclei; 11, 12, and 13, stomata vera of the lymph spaces.

tiring and indefatigable energy for years to establish the idea that at the junction of three or more endothelial cells there exists what he termed stomata vera, while on an interendothelial line

Digitized by Google

there existed what he termed stomata spuria. Oedmanson, of Stockholm, in 1862 confirmed Recklinghausen's labor as regards the stomata vera. Professor His introduced the word endothelium in 1865. Up to this time the strife was as to the essential elements of the peritoneum, which was settled not as Luschka did in favor of the subserous tissue, but in favor of Henle's views, i. e., the endothelia is an essential structure of the abdominal serosa. From 1860 to the present a brilliant galaxy of investigators have entered the field of microscopical research in the peritoneum to find out if possible its structure and function. It is a pleasure to read such Germans as Auerbach, Teichman, Recklinghausen, Ludwig, Schweigger-Seidel, Affanasiew, Dybkowsky, and Dogiel; such Frenchmen as Ranvier, Dubar, and Remy; such Italians as Bizzozero, Maffuci, Muscatello, and Salvioli; such Englishmen as Klein and Burden-Sanderson; not to forget the noted Russian of Charkow, whose unpronounceable name is spelled Chrzonszczewsky.

By certain processes certain conclusions were arrived at. The employment of a one-half per cent. solution of nitrate of silver for some three minutes on peritoneal endothelium produces dark lines between the cells. It also produces dark lines between the endothelia of the lymph vessels and blood vessels. Recklinghausen's method enables us to see endothelia in locations where previously they could not be observed. Like all discoveries it brought out a train of new views. This persistent worker showed that organized or unorganized matter, as milk or Berlin blue, introduced into the peritoneal cavity would pass into the subserous lymph spaces. He selected the centrum tendineum (diaphragm) for his investigation to determine the methods of passage of matter from the peritoneal cavity to the lymph vessels of the subserous connective tissue. A piece of the

FIG. 2.—A figure to represent a portion of the peritoneal serosa of the centrum tendineum of a rabbit after injecting fluid into the peritoneum for forty minutes while alive and again forty minutes while dead. The specimen was slightly silvered, then prepared by a solution of gold chloride 1 part, acetic acid 5 parts, and water 994 parts, whence it presented a most beautiful and brilliant picture. 2. nuclei; 1, 1, show the leucocytes emerging from sub-peritoneal spaces through stomata vera or stomata spuria—however, always through interendothelial space; 3 points to a leucocyte emerging from a stoma verum; 5 indicates a leucocyte emerging through a stoma spurium; 6 is a leucocyte entirely free. Note that the leucocytes become elongated as they emerge. 4 and 7 point to the leucocytes shimmering through the cover plate. Under the cover plate the leucocytes are round. Peritoneal irritation induces the leucocytes to come to the surface.

membrane was put on a slide under the microscope and the milk drops searched for. When the drops were found a drop of the solution of nitrate of silver was allowed to percolate under the cover glass. Exactly where the milk drops passed through the peritoneum the silver salts produced pictures of dark colored openings which were large enough to allow the milk drops to pass through the peritoneal openings to the lymphatic vessels immediately below. These dark mouthed peritoneal openings were especially abundant at the borders and over lymph vessels. From these investigations Recklinghausen drew the conclusions that the lymph vessels of the diaphragm have a direct communication with the peritoneal cavity. Also that the openings have double the size of red blood corpuscles. These openings, known as stomata vera, were confirmed by all diligent histologists. In 1862 Oedmanson, of Stockholm, while working in the pathologic institute of Berlin on the peritoneum of frogs, noticed little black points in the interstices of the endothelial cells and made special study of them. These openings are known as stomata spuria. Oedmanson's work was no doubt done under the sharp suggestive eye of Virchow, for Virchow had previously seen these black points and compared them to lymph capsules. The investigations which I here communicate were gained by the examination of the peritoneum of the man, horse, dog, cow, sheep, pig, several birds, turtle, and several embryos, frog, rabbit, and cat, but especially the frog and rabbit. So far as actual ob-

FIG. 3.—From guinea-pig's pleural surface of diaphragm, pencilled, stained with silver nitrate and drawn to oc. 4 ob. 3 and reduced one-third. The object of the cut is to show how the juice canals in the ground substance flow into the lymph capillaries, i. e., the lymph canicular system and the lymph vessels are directly connected with each other: 1, 2, 3, lymph vessels; 4, 5, 6, denote juice canals in the ground substance which is marked 7, 8, 9, and 10. At 11 and 12 observe the juice canals in the ground substance blend with the lymph vessels; 13 and 14, valves of the lymph vessels; 15, 16, endothelial cells and nucleus in the ground substance. This guinea-pig had been injected with a solution of Berlin blue fifteen hours before death; 17 shows lymphoid corpuscles in the vessel; 20, endothelium of lymph vessels. One can observe the particles of Berlin blue free in the lymph vessels marked by a +. One can see the leucocytes in the lymph vessels and some have enclosed in the bodies particles of Berlin blue. One can occasionally observe particles of Berlin blue scattered in the juice canals. By fifteen hours of peritoneal irrigation are more prominent, and at 11 and 12 is seen the most typical transition of the cells of the lymph canalicular system into the lymph capillary vessels. With 1-15 oil immersion lens one can discover vast numbers of colored granules overlooked by low power. At 18, 19, and 20 may be seen lymphoid canalicular systems which do not nearly fill the space.

servation of the peritoneum of all of these animals under a good microscope there seems to me to be no real difference. It is true that the shape and outline of the endothelia differ, but the stomata are the same. The peritoneum possesses a single layer of flat endothelial cells. (I discard the name epithelium for serous membrane.) In general the endothelial cells are various in all dimensions and outlines. They exist of all shapes, from the enormous zigzag outlined endothelia of the frog's lymph sac to the quite regularly formed endothelia of the cat's mesentery. However, one can say in general that the outlines of the endothelia covering lymph vessels are sinuous, while the endothelia covering peritoneal supports (ligamen-

Digitized by Google

tum peritonei) are more smooth in outline. The best way to treat the peritoneum in order to observe the endothelia is to open the animal's abdomen and pour the one-half per cent. of silver nitrate on the parts while in situ for, say, three minutes, whence the intercellular lines will present if little disturbance from trauma or dragging has occurred. But if one snips a small piece of the peritoneum, e. g., the omentum, and puts it under the cover glass and allows the silver solution to slowly percolate under it, the black interendothelial lines will appear in intensity according to the strength of the silver solution and the length of time sunlight works on it. At first the interendothelial lines are very fine and delicate, but the color gradually spreads until a large part of the endothelial surface is involved in a speckled brownish color. Of course the lighter the lines can be colored, the better view they present, as no adjacent matter then shows any color. However, according to the strength of the silver salts and the sunlight all grades of staining will arise. What these interendothelial black lines represent after the treatment with solutions of silver nitrate is questioned. But undoubtedly the lines represent an albuminous substance blackened by action of silver. The varying degrees of color from the center of the endothelial cell to its circumference is explained by the greater amount of albuminous substance very near the circumference of the cell. If we stain for a couple of minutes the specimen in logwood the nucleus comes out prominently as a clear-cut, oval body, often placed excentrically. Some endothelia may possess two nuclei.

FIG. 4.—Lymph vessels of a man about thirty years old, twenty-four hours after death, pleural side of diaphragm. Oc. 4 ob. 3 R. The diaphragm was pencilled. Silver nitrate applied one hour one-fourth per cent. Ground substance, 1, not drawn. The larger vessels show quite elongated spindle-shaped endothelia, but many of the smaller show a very sinuous shaped endothelia, indicating that they are capillaries; 2 indicates the confluence of six lymph vessels; 1 shows the ground work of the lymphatic network. Note the irregular bulging of lymph vessels.

The chief attention should be concentrated on the (a) stomata vera, which are round or oval openings existing at the junction of three to thirteen cells, i. e., the stoma is the center of a group of endothelial cells. The stomata vera are lined with polyhedral granular cells, young germinating endothelia. The stoma verum is the source of new endothelia to supply decaying ones. Doubtless the stomata are the regulators of peritoneal fluids. We can easily find open or closed stomata on the peritoneum of the man, cat, horse, dog, and especially the frog and rabbit.

The next structure to consider is the stoma spurium. The stomata spuria are drop-like, dark spots, either on an intraendothelia or at the common junction of endothelial cells. Virchow called these lymph corpuscles. Recklinghausen, Oedmanson, and Klein designate the stomata spuria as connective tissue corpuscles jutting upward between the junction of the endothelial cells. Some consider the stomata spuria as precipitated debris from the silver nitrate.

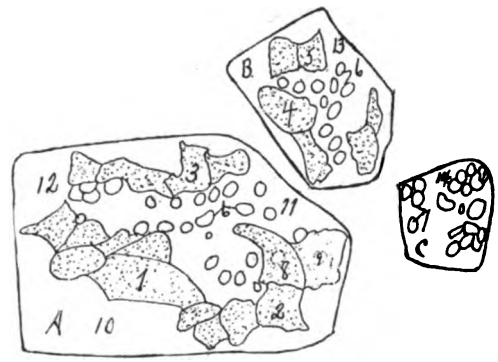


FIG. 5.—Drawn from the abdominal side of the diaphragm of a girl thirteen years old to illustrate the pores in the membrana limitans. The diaphragm was removed seventy-two hours after death. It was stained with a 1 per cent. solution of nitrate of silver for ten minutes. It was then placed in carmine colored fluid for ten hours, where it absorbed considerable numbers of colored granules of carmine. It was then placed in Muller's fluid for two days, sections prepared by snipping off small bits of the zona tendinea and mounted in glycerine. The endothelia of the diaphragm were in general mostly desquamated, and especially the cover plate and its edges were much dissolved. In this diaphragm the apertures of the membrana limitans appear mainly in groups. The groups are in general 10, 20, 30, and 40 in a group. Some groups of apertures in the membrana limitans appear to be 75 or 100, yet this may be where two or more groups coalesce. The size of the holes would appear large enough to admit one to four red blood corpuscles abreast. Single holes may appear alone in the membrana. There is no doubt but some of the bright spots in the cover plate represent the apertures in the membrana limitans, as it is plain to see in this diagram. Some have interpreted the bright spots in the color plate as holes peculiar to it. The holes are round, oval, oblong, square, but chiefly round or oval. The maceration of the endothelia and their falling off by merely washing or rinsing is one of the best ways to observe the holes or pores. However, on vast areas of the diaphragm one cannot see the pores. Hard brushing destroys distinct views of the pores. Nos. 1, 2, 3, 4, 5, endothelia isolated and connected; 6, 6, 7, show the shape, size, and relation of the apertures in the membrana limitans; 8, 9, nuclei of endothelia; 10, 11, and 12 in A and B, and 14 in C show the membrana limitans with its pores. It resembles a soap bubble in fineness, but is visibly granular.

Another structure should be carefully studied. The intraendothelial stomata (author) appear to be openings in the plate of the endothelial cell itself. The structures and functions so far escape the power of the microscope.

Again, the lymphatics of the peritoneum is a wide field. The subject of great interest to the abdominal surgeon is how do peritoneal fluids pass from the abdominal cavity into the general system? For example, in injecting colored solutions into the peritoneal cavity of rabbits, I could only find that the colored solutions had passed through the centrum tendineum of the diaphragm. Maybe further microscopical research will enable me to find the colored granules in the other portions of the peritoneal lymphatics. Now it may be that rapid deaths in perforative peritonitis are explained by the stomata vera, especially of the tendinous portion of the diaphragm rapidly absorbing the toxic fluids. Another matter of great interest is the method of peritoneal regeneration of its endothelia. I have found that for the study of germinal endothelia the typical subject is the omentum majus, especially the splenic portion. Great tracts and cords can be noticed growing in many places of the omentum. The new cells

Digitized by Google

vacuolate and repeat themselves until the multiplying endothelial plates are numerous enough to form great wide lymph channels. In fact, the omentum in man, cat, dog, horse, frog, and rabbit may be noted as a great panorama of growth, regeneration, germination, and vacuolation of endothelia. In the omentum can also be observed typical open and closed stomata vera and many stomata spuria; beautiful tracts of fat and their relative intricate network of lymph vessels, sinuses, and capillaries.

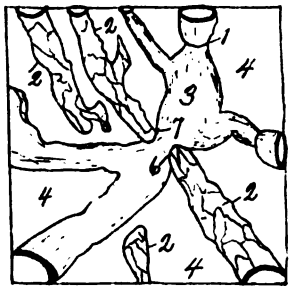


FIG. 6.—Lymph vessels of pleural surface of diaphragm of rabbit. Penciled and silver nitrate one-half per cent. applied. 1, valves; 2, 2, 2, lymph capillaries with endothelia delineated; 3, lymph vessel trunks whose endothelium is not marked. Note the irregular bulging of the walls. 4, 4, 4, ground substance not drawn. Oc. 4 ob. 3 R. 7 and 7, valves of capillaries opening into the main trunks.*

CONCLUSIONS.

1. There are three kinds of openings in the peritoneal membrane.

2. The stomata vera are vertical canals which directly connect the peritoneal cavity with the subserous lymph canals.

3. The stomata vera are lined by granular, polyhedral protoplasmic nucleated cells.

4. They are sources of supply of new endothelia.

5. They undoubtedly regulate the amount of peritoneal fluid.

6. The stomata spuria are perhaps young connective tissue cells projecting up between the endothelial cells to repair the places of dying ones, or they may be leucocytes or lymph corpuscles.

7. Some assert that stomata spuria may be precipitated interendothelial substance.

8. The intraendothelial stomata are yet unplaced.

9. Even slight inflammation of the peritoneum denudes its endothelia as was easily demonstrated in the experiments of the rabbit and on specimens which I secured on the living in gynecological operations and the portions of the peritoneum secured at autopsies.

10. The chief place in the peritoneum of absorption of solid particles is in the centrum tendineum.

11. The peritoneum will, during life, according to the author's experiments, absorb as high as 10 per cent. of the body weight inside of an hour.

12. The peritoneum while recently dead will absorb as high as 6 per cent. of the body weight in less than an hour.

13. The physiology of the peritoneum teaches us not to irrigate in abdominal surgery, as it only distributes the germs and facilitates absorption through the centrum tendineum.

14. As the recently dead peritoneum absorbs similarly to the living we must question the validity of so-called "vital" force and look to some other power, as filtration, imbibition, and osmosis.

15. Whether the paths of absorption of the peritoneal fluids be by way of the blood vessels or by way of the lymphatics is so far not definitely settled. But the author of this paper has assumed from observations of experiments that the essential path is by way of the lymphatics.

16. The histology of the peritoneum teaches that its lymphatics should be divided into the interstitial spaces and lymphatic channels. The interstitial spaces are the places of nourishment of cell growth and reproduction. The lymph channels are merely transporters.

17. The interstitial spaces are fed by the blood capillaries and drained by the lymph capillaries, and between these two transporting vascular tubes lie the interstitial spaces.

18. Filtration, osmosis, and stomata play the chief rôle in peritoneal absorption.

19. The nerves of the peritoneum are vast in extent and numbers. They are (a) medullated; (b) non-medullated, and (c) various forms of termination, as the Vater-Pacinian corpuscle. One of the best animals on which to demonstrate the peritoneal nerves is a young kitten, and the best reagent is acetic acid and gold chloride.

20. The numerous terminations and vast area of nerves in the peritoneum accounts for profound shock which is intimately and closely associated with the calibre of vessels controlled chiefly by the sympathetic nervous system.

* The above cuts appeared in an article—The Diaphragm and Centrum Tendineum—in the Journal of the American Medical Association, January and February, 1897.

UNIQUE RESULTS FROM TRAUMA OF THE EYE-BALL—REPORT OF CASES.*

BY D. C. BRYANT, M. D.,

OMAHA, NEB.,

PROFESSOR OF OPHTHALMOLOGY AND OTOLOGY, CREIGHTON MEDICAL COLLEGE.

CASE I.—L. M., male, 40 years of age, presented himself at my clinic, at St. Joseph's Hospital, January 1, 1895. He gave the following history: One year before, while driving cattle and swinging a whip with a long lash, the tip of the lash, which had a knotted end, struck his right eye with considerable force. Although he suffered considerably the remainder of that day and the following night, with the eye, the next day it seemed all right, and gave him little trouble afterwards until some six or eight months had passed, when he accidentally noticed that his vision was very much impaired in the injured eye. From this on vision rapidly failed, and in a short time the eye became painful. He then consulted several oculists, in this and neighboring cities, all of whom agreed as to the almost absolute certainty of there being a

* Read before the Omaha Medical Society, February 23, 1897.

Digitized by Google

new growth within the eye-ball, and they also all advised enucleation as the only remedy. This the patient would not consent to at that time, but having suffered severely with it for two or three months, and having given up all hope of relief in any other way, he presented himself at the clinic for the expressed purpose of having the eye removed. The eye-ball was enucleated and turned over to Dr. J. S. Foote for microscopical examination. His report verified the diagnosis of the several gentlemen who had previously examined the case, and furthermore stated that the new growth was a sarcoma. The patient made a rapid recovery and was discharged from the hospital in a few days. In June, 1895, he returned to the hospital, much alarmed about a new growth, of small size, which had made its appearance in the soft tissue of the orbital cavity, well forward at the junction of the floor and inner wall. Although the growth was small and not very firmly attached to the periosteum, evisceration of the orbital cavity was advised and consented to. The following day this was done and the growth given to Dr. Foote for examination, who again reported sarcoma.

Nothing more was heard from the patient, after leaving the hospital the second time, until about a month ago, when he returned complaining of trouble with the other eye. On examination the eye was found to be more prominent than normal, and pushed slightly to the temporal side of the orbital cavity. The vision is reduced to 20-100 and an ophthalmoscopic examination shows an optic neuritis. The new growth can be distinctly felt at nasal side of eye-ball, and there is no doubt in my mind as to the nature of the disease or the final outcome of the case. The question might arise, in a case like this, as to whether it is the physician's duty to remove the eye and the growth immediately, thus increasing the chance for prolonging life, or to leave it alone and let the patient enjoy the little vision he has until the progress of the disease destroys it entirely. The patient decides the question in this case, by very emphatically declaring that the eye remains with him as long as any vision is left.

This case is very interesting to me, because it is the only one that I have seen during twenty-two years of active practice where sarcoma has attacked the second eye or orbital cavity, the rule being that the final return is either in the liver or brain. The right orbital cavity, from which all the soft tissue, together with the periosteum, was removed, is at present in a perfectly healthy condition, showing no signs of further trouble.

CASE II.—Mrs. S., age 35, came to my office January 15, 1897. She gave the following history: Seven weeks before, while attending to the fire one night, she accidentally ran against the handle of a damper in the stove-pipe, the sharp end of which struck her left eye, inflicting a severe and painful wound. The eye was greatly inflamed for several days, was very painful, so much so that they were compelled to call in their family physician. He advised them to consult an oculist, which they neglected to do, for some unknown reason, until after the second eye became involved. Sixteen days after the receipt of the injury the second eye became inflamed and was even more painful than the first. Shortly after this she placed herself in the hands of an oculist, but in spite of all that was done the case went on from bad to worse, until at the time she came under my care vision was reduced to perception of light in either eye; and, I might add here, that this is the usual result when once a sympathetic ophthalmia is fairly started. An examination revealed the fact that she had received a penetrating wound in the left eye, at sclero-corneal junction on nasal side. The iris had prolapsed and had healed into wound in cornea. The pupil was drawn well to nasal side and closed by inflammatory exudate. This eye was no longer painful, and the inflammation was evidently rapidly subsiding. Vision was reduced to perception of light or a little better, patient being able to distinguish large objects passed before the eye. The second eye presented all the symptoms of a plastic irido-cyclitis, and was still very painful.

This case has been under observation now for four weeks. The pain entirely disappeared after the first forty-eight hours, and gradually the inflammatory symptoms subsided, until now very little remains. The injured eye was not removed, because the case was not seen until too late for any benefit to be gained by such an operation. The vision also seemed rather better in this than in the uninjured eye. A few days ago an iridectomy was done in this eye, liberating entangled iris, and producing a fair-sized artificial pupil. What the ultimate result will be it is yet too early to determine, but the outlook is far from promising.

This case is reported, not because of the uncommon occurrence of sympathetic inflammation in the eye, but because such cases are common, and because in this case the second eye became involved so very early, and also shows so very plainly how absolutely necessary careful watching and prompt action are in these cases in order to prevent disastrous results. Neither in hospital or in private practice have I ever seen a case before where the second eye became affected as early as in this, though such cases have occasionally been reported.

CHILLS in the course of typhoid fever, says Osler, though usually attributed to malaria, are very rarely due to this cause.

Omaha, Neb., Feb. 17, 1897.—I am pleased with the character and tone of your paper. Keep it full of original matter from western physicians, and admit nothing unless first-class, and you will have the support of the profession. Yours truly, Dr. A. L. Merriam.

Digitized by Google

HEMATURIA.*

BY B. F. WEST, M. D.,
LINCOLN, NEB.

While I have given the title of this paper as hematuria it may seem that the title is justified to the same degree as is found in the heading of one chapter in the Koran—the Mohammedan bible. The Koran contains one chapter with the distinguishing title of "Cow," and the sole claim that the cow has to that which follows in that chapter is that her name occurs therein just once. It may be well for you, and I grant you the privilege, to reserve all rights to title till I have finished, when you may choose, if you so please. But the same innateness stamps the profession as the laity—the demand for a name.

I desire first to briefly narrate two cases of hematuria, practically typical to my purpose.

In the spring of 1894 Miss L. called at my office, saying she was suffering from Bright's disease, and had been for several years. Some weeks before she had been told by a physician that she had 20 per cent. of albumin and considerable blood in her urine and that her days were few. Her general appearance gave no indication of such condition, but she gave a history of attacks of gravel during girlhood and later of hemorrhage from the kidneys, as she thought. Urinary examination found albumin, blood, phosphatic sediment with blood. Urine alkaline in reaction, specific gravity 1018, turbid, and pinkish in color. Upon standing, a heavy sediment formed, compos d of phosphates, urates, and blood, having a pinkish tint not unlike that formed by urates. The supernatant fluid also having a decidedly pink tint, evidently due to the solution and admixture of blood. No tube casts. The albumin being accounted for by the presence of blood, I suspected that the hemorrhage had its source outside of the kidney. Vesical and pelvic examination proved the suspicion well founded, the cause being a fibroid on the anterior surface of the uterus and congestion of vesical mucous membrane. The diagnosis was confirmed by another physician.

Please note in this case the presence of albumin and blood, and the absence of tube casts or any groupings of blood cells suggestive of casts. I desire to say also that it required seventy-two hours before anything like complete sed'mentation took place by which one might suspect the true source of the hemorrhage.

Treatment addressed to this source, the bladder, decidedly improved the patient and she is to-day in fair health, having had no treatment for many months.

The second case was one of intermittent fever. October 30, 1896, I was called to see Mr. H., who, the messenger said, was suffering with a very hard chill. I found the patient just getting over a typical malarial chill of about one hour's duration. The fever which followed lasted sixteen hours, with a light sweating stage afterward. Fifty-two hours after the beginning of this paroxysm a second occurred, the chill of less severity and the fever continuing about twelve hours. About forty-eight hours from that time the third and last paroxysm occurred, of less severity and much shorter duration. In the intermissions, contrary to my former experiences and observations, the patient showed no disposition to rise from the bed or to eat any kind of food. There seemed to be considerable prostration, which in the ordinary form of intermittent fever, such as this seemed to be, does not usually exist. Urinalysis discovered albumin, blood, blood casts, leucocyte casts, hyaline casts and many groupings of blood cells suggestive of casts, though not distinctive; reaction feebly acid; specific gravity 1025; slightly turbid, with a suggestion of a pinkish tint. When the sediment had formed it gave the color of urates, with the supernatant fluid quite clear and of nearly normal color, slightly darker. A good recovery was made, though a little slow, and urinalysis some weeks afterward showed no blood and no albumin. Based upon these facts I desire to ask: First—Does the presence of albumin in the urine always point to Bright's disease, as was supposed in case 1?

In both the cases cited there was albuminous urine, yet I do not think that either case was one of albuminuria, or of nephritis. To my mind the presence of blood in these specimens and the quantity in each case, respectively, accounted for practically all the albumin present, even for the 20(?) per cent. which my brother practitioner is reported to have found in case No. 1. A blood test should be made in every case of albuminuria, and if blood be found one may be sure that at least a part of the albumin is due to the presence of blood, if not all. We have had acquaintance for years with what has been called hematogenous, or physiological albuminuria, principally through the books. But recent observations show a larger number of persons with albuminuria than was formerly suspected, and that in persons apparently in perfect health the albumin and even casts may exist without other signs of nephritis. One recent investigator found that of fifty persons in apparently perfect health, in forty per cent. there were traces of albumin, and in twenty-six per cent. there was not only albumin, but hyaline and granular casts.

This is rather startling, especially, as we have been accustomed to considering albuminuria to give presumptive evidence of nephritis, and when associated with tube casts as positive diagnostic signs of the insidious and dangerous Bright's. More extended investigations are needed upon this point, both as to the number having albuminuria in apparent health, and as to the subsequent history of these persons. Since it may materially affect diagnosis, prognosis, and treatment in case of disease, or supposed disease, in suhc patients as show these signs.

* Read before the Lincoln Medical Society, February 23, 1897.

Digitized by Google

Second—Can the source of hematuria be determined by the ordinary methods pursued for that purpose? By ordinary methods I do not mean the use of all the suggestions found in the books, but those commonly used by the majority of practitoners, as: noting the color of the urine, the presence of clots, the irritability of the bladder, the character of the mixture of blood and urine, and the appearance and more or less complete separation of the sediment. It seems to me that it requires a practiced eye, and that better skilled than most of us possess, to determine the dark or smoky urine of renal hematuria, as the depth of color varies and may be simulated by the ingestion of certain drugs, and certain articles of diet. The irritability of the bladder, and the aching in the loins may exist in both renal and vesical hematuria, as I found in the two cases cited. Writers agree that clots are of no value in diagnosis. They may be present in any form or absent in all forms of hematuria. In the two cases mentioned, clots were found in neither. Perhaps a little more dependence may be put in sedimentation than in any of the preceding signs. Where the sediment forms, leaving a clear urinary fluid above, it stands as a fair point for diagnosis, yet not invariable and positive. For I have seen a pinkish tint in the supernatant fluid after the sediment had formed in vesical hematuria, as in Case I, and a clear layer of urine in renal hematuria, as in Case II. But I am convinced that the urine is not usually allowed to stand long enough for complete sedimentation to take place. At least forty-eight hours being necessary, in my experience, and sometimes seventy-two hours, and even then it is not always satisfactory. The pinkish or blood color of the urine, so often remarked upon as the color of vesical hematuria, is due to the usual alkalinity of the urine in this condition. If, as not infrequently happens, the urine in other forms of hematuria is alkaline or neutral in reaction, then we get the same pink or blood color, differing in degree, as the amount of blood is more or less.

A pinkish tint has been noted in urine containing blood when the reaction was feebly acid. This much used test has, then, its limitations and modifications and cannot stand, without proof by other signs to support it.

One distinguished author says: "In vesical hematuria the last drops of urine, as a rule, contain most blood, whether the hemorrhage is still going on or has ceased." Probably true; but the physician's opportunity to test the rule, by observing these last drops in urination, under any circumstances, so infrequently occurs, or can be forced to present itself, that this aid in diagnosis may be considered to be practically useless. I believe the only sure sign of renal hematuria to be blood casts, determined of course under the microscope; excepting, those cases of renal hematuria due to trauma, and the presence of calculi or other surgical conditions of the pelvis of the kidney. In the absence of blood casts the diagnosis must be by exclusion. If careful vesical and pelvic examination does not reveal sufficient cause for the hematuria, its renal source may be fairly inferred.

Another quite important question might be asked in view of some of the statements previously made, and that is, Would it not be profitable, to both physician and patient, for the physician to do urinalysis in every case possible—whether renal disease be suspected or not? I am sure that not infrequently new light would be thrown upon some symptoms and conditions otherwise not understood. Our failures to cure might be explained sometimes, and the treatment of that particular disease or patient changed somewhat, by the knowledge thus gained, and our diagnosis and prognosis materially affected by the knowledge of the conditions existing in our patient, when in apparently perfect health. I am of the opinion that the persons who persistently show albumin and casts, though apparently in perfect health, are in the border land, if not upon the border line, of Bright's disease. If this condition of albumin and casts exists in twenty-six per cent. or even ten per cent. of the apparently perfectly healthy people, who can estimate the amount of good that might be done by putting these patients on their guard, and regulating their dietary and hygienic conditions; or the profit to the physician by the modified prognosis and treatment based upon such knowledge? These patients may lack only the exciting cause to develop a genuine case of probably fatal nephritis.

PHOSPHATURIA—A CASE. SUPRAPUBIC CYSTOTOMY—A CASE.*

By CHARLES C. ALLISON, M. D.,

OMAHA, NEB.,

SURGEON TO THE PRESBYTERIAN HOSPITAL, ETC.

Our cases to-day have symptoms referable to the urogenital tract.

CASE I.—The first, a male 54 years of age, presents with the statement that an impediment to micturition has suddenly developed and with this there is severe pain in the urethra.

Examination reveals a foreign body in the anterior urethra which is easily extracted with the alligator forceps, and the stone proves to be a phosphatic concretion, measuring one and a quarter inches in length and five-eighths of an inch in diameter.

There is in this case a distinct history of recurrent renal colic, the most aggravated attack being less than twenty-four hours ago.

Our care in this case should be directed toward averting future recurrences, because similar or even smaller stones are liable to cause more trouble in the kidney or bladder than the one now passed.

The urine in this case is turbid, neutral in reaction, irritating to the urethra, and is followed by an opaque white stream which is quite pathognomic of phosphaturia.

*A clinical lecture delivered at the Omaha Medical College.

Digitized by Google

Cases of phosphaturia are sufficiently common and sufficiently amenable to treatment to warrant our giving some advice upon the use of remedial measures and upon prophylaxis.

Urine of the character just described is apt to excite the patient and lead to some "reading up," mostly of quack pamphlets, and the sufferer soon has visions of loss of manhood and similar magnified evils.

Dissipation, excessive mental or physical work, and a vegetable diet are exciting causes and in the treatment these faults must be regulated. A meat diet, regular hours, and the administration of dilute acids—hydrochloric or phosphoric—will be found promptly useful as a rule. For the more persistent cases I would recommend urotropin in fifteen-grain doses.

Urotropin is an amine derivative of formic aldehyde, and its usefulness in this class of cases has been suggested by Nicolaire (Am. Prac. and News, vol. 20, p. 485), who found formalin a preservative of urine and a solvent for its solids outside the body.

Formalin being an irritant, cannot be used internally, yet its derivative may be used alone when it acts as a mild diuretic and urinary solvent; it seems to have an application as useful as has been generally accorded formalin in surgical therapy, or it may be combined with salicylic acid and an underlying gouty or rheumatic diathesis counteracted as a predisposing factor to lithiasis.

CASE II.—Our next case is a male, æt. 48, who for years has complained of vesical distress at intervals, and latterly the suffering has been more constant and more intense, and with this, blood has appeared in the urine and micturition has been at times suddenly arrested. These symptoms strongly suggest a stone in the bladder, and this has been confirmed by sounding. In some cases the sound will not readily detect a vesical calculus. This is true in prostatiques with a sacculated trigone, trabeculated bladder wall with thickened mucous membrane, and probably an encysted stone.

In these cases, in addition to the instillation of a few ounces of Thiersch's solution into the bladder, the short beak of the stone sound should be turned downward and the post-prostatic pouch exposed with the patient in different positions.

In selecting the suprapubic method of removal I feel that we have in the majority of cases the safest and most satisfactory procedure.

Surgical care in the preparation of the patient, followed by the introduction of eight ounces of Thiersch's solution into the bladder, constitute the preliminaries. I would discard the rectal bag for the reason that the additional tension it causes may lead in a friable organ to an undiscovered intraperitoneal rupture, and unless an extra assistant is detailed to do this a hasty disinfection may be incomplete and thus break the chain of cleanliness.

In the median incision the peritoneum and its overlying fat are usually in view and can be easily retracted upward; after which the previsceral veins are separated and the bladder incised, its edges being best supported by silk guy retractors.

The stone removed and the bladder well explored, a double drainage tube is used where the bladder is most inflamed, and daily irrigation completes the treatment. This stone being of the oxalate of lime variety and the urine highly acid, future immunity should be attempted by measures which are best suited toward maintaining a uniform alkalinity of the blood and thus keeping in solution and facilitating the excretion of the effete solids which represent physiological waste. The various lithias, piperezine, and lysol are useful, mainly, if not entirely, on account of the water taken with them, but the liberal use of water and a mixed diet, without alcohol and with proper exercise, facilitates the oxidation of effete material in the blood and maintains a proper standard of waste products, and governs the relation between the amount developed in the blood and eliminated in solution by the kidneys.

AN OBSERVATION.

BY JAMES L. GREENE, M. D.,
UNIVERSITY PLACE, NEB.,
LATE PHYSICIAN TO THE NEBRASKA HOSPITAL FOR THE INSANE, NORFOLK; LATE FIRST ASSISTANT SUPERINTENDENT OF THE NEBRASKA HOSPITAL FOR THE INSANE, LINCOLN; LECTURER ON INSANITY, DEPARTMENT OF LAW, NEBRASKA STATE UNIVERSITY.

A most striking example of the inability of the average layman to judge the mental soundness, or unsoundness, of an individual whose sanity is questioned was furnished by the present house of representatives of the Nebraska legislature, at a recent morning session.

By a resolution, regularly introduced and passed at a previous session, a Mrs. M. was given permission to address the house of representatives at the above mentioned time, fifteen minutes being allowed for the address. No one knew upon what subject she intended speaking. When introduced by the speaker she began, in a manner the candor of which carried conviction, the most plausible description of a system of abuses and maltreatment of patients in the Hospital for the Insane, located at Lincoln, alleging that a conspiracy existed between its officers, attendants, and the county authorities, whereby sane persons were incarcerated, and, by means of annoyances and persecutions, rendered insane. She described, most graphically, a system of electric discipline, which consisted of concealed wires connecting the officers' and attendants' rooms with those of the patients, through which powerful electric currents were passed, especially at night. A peculiar and invisible searchlight was declared to be in operation in and about the building, whereby the thoughts and desires of the patients were discov-

Digitized by Google

ered. She declared, most seriously, and with the appearance of perfect candor, that an attendant was kept on duty the entire night, always screaming, groaning, swearing, and otherwise rendering the night hideous and rest an impossibility, all for the purpose of making the sane inmates insane.

Being somewhat interested in the study of mental maladies, especially in their legal relations, and having on several occasions heard "non-expert witnesses" (laymen) give without hesitation an opinion that a prisoner on trial for murder was or was not insane, I concluded that a little investigation would, no doubt, give me some information that would enable me in the future to better judge the credibility of such witnesses. Inquiry was made of several members of the House; the subject was introduced and discussed with, and in the presence of, others, not one of whom suggested the suspicion of mental unsoundness on the part of this woman. She is evidently suffering from paranoia—a form of mental disease which produces either the most persistently troublesome or cunningly dangerous lunatic. This lady probably belongs to the former class of patients,—those who continually annoy courts and those in authority, seeking redress for imaginary wrongs and persecutions. There is, however, but one step in the mental process of such an individual from the belief that redress can be obtained from the courts and those in executive positions to the conclusion (upon failure to receive it) that the judge, governor, or even the president, is in collusion with his persecutors or enemies, and that the individual so harassed ought, in justice to himself, to rise up and smite them, or that he is given a divine command to remove them. A cunningly-planned but generally boldly executed homicide usually results from this conclusion. This form of mental disease, being always chronic, and, in the light of present knowledge, regarded as incurable, public comfort and the individual safety of those in authority demands that this class of unfortunates be incarcerated for life, subject, always, to repeated examinations, and release should the disease disappear.

[It may be of interest to our readers to know that the lady above referred to is the same person as the first case reported, on page 35 of the February number of the REVIEW, by Dr. J. T. Hay, in his paper on "Paranoia." The solons of the House of Representatives, as they listened to the thrilling speech, never surmised that they were listening to a typical paranoiac.—ED. W. M. R.]

Omaha, Neb., February 19, 1897.—In my opinion your journal is a good one—up to date in every respect—and I hope that it will not be long before you can see your way clear, by increased patronage, to make it a semi-monthly, and finally a weekly. Wishing you the success that you deserve, I am, yours, R. C. Moore.

THE RELATION OF THE MEDICAL PROFESSION TO PHYSICAL TRAINING AND EDUCATION.*

BY R. A. CLARK, M. D.,

LINCOLN, NEB.

PHYSICAL DIRECTOR, UNIVERSITY OF NEBRASKA.

Present Status—(Synopsis.)—Physicians should prescribe physical exercise freely, definitely, and intelligently. Modern physical education has a scientific basis. Ex-circus men are no longer in demand as college "professors" or special supervisors in city schools. Leaders include eminent medical graduates. Among them in colleges and universities are Hitchcock, Seaver, Anderson, Sargent, Enebuske, Eliza Mosher, Delphine Hanna, Alice Foster, Leonard, McKenzie, Wood, Phillips, and Whittier; in city schools, Hartwell, Gardner Smith, and Baker; specialists, Bowditch, Channing, Dickinson, Gulick, and Wey. A high standard is held by the Young Men's Christian Associations.

Relation of Exercise to Modern Science.—The intimate relations between mind and body, nerve and muscle are being recognized in these days as never before, problems of mental development are being studied in the psychological laboratory by means of muscular movement. Anthropometry and muscular development are being drawn upon. The localization of the cortical centers has resulted largely from observations on muscular movement or on the degeneration of tracts or fibers consequent upon loss of function. Conversely, repeated experiments, largely upon animals, have shown that the following out of different lines of physical education develops literally and histologically the different areas of the cerebral cortex. Pedagogy is reviving its youth in the application of these truths and principles to the children of the land. As the medical profession has had a large part in the evolution of these facts and principles, so the intelligent physician has laid upon him to-day a tremendous responsibility in their application to the many cases which come to his attention and care.

Relations of Exercise to General Life.—In a general way, and technicalities aside, systematic exercise (1) stimulates normal growth. Dr. H. G. Beyer, of the Annapolis naval school, in a series of observations extending over four years, compared the growth rate of cadets taking systematic exercise with the growth of those who did not. He found that between the years of sixteen and twenty-one those who took systematic exercise increased in height one inch in addition to the normal growth rate, the additional inch being due solely to the exercise. I could give you other data and instances to the same effect.

(2.) Systematic exercise is a protection against disease. Not that it will ward off scarlet fever, diphtheria, typhoid, or small-pox, but, other

* Read before the Lincoln Medical Society, February 9, 1897. Owing to limited space parts of this paper are omitted or condensed.

Digitized by Google

things being equal, he will be sick the least, or, being sick, will make the best recovery, whose muscular system is in the best condition. Statistics from Amherst College show that under regular and supervised exercise the sick rate was reduced from three in the freshman year to one in the senior year.

(3.) Regular exercise adds to general usefulness and length of life. Power, both mental and physical, is in proportion to activity, and the man whose muscular system is toned up by regular exercise is more valuable to himself and to society, whatever may be his work, than the flabby, dish-rag type of man, no matter how bright his mind may be. No physician will deny these statements, yet no class of persons is more negligent in regard to its own welfare on this line than the medical profession. I venture the assertion, too, that at least 98 per cent. of the time, thought, and energy of the average physician is devoted to the cure of disease, and not more than 2 per cent. to the therapeutic effects of exercise.

Ignorance of Profession on This Line.—What exercises, how often, and how much at a time shall be prescribed for various conditions, such as scoliosis and other deformities, malnutrition, weak lungs, weak hearts, dyspepsia, Bright's disease, weak-minded children? Too much exercise is as bad in some cases as too much morphine. What does the medical profession as a whole know about the problems of exercise, the physiology of fatigue, mental and physical, the relation of muscular overwork to the excretion of waste products, the physiology of breathlessness, the effects on the heart of different forms of exercise, or the story told by a sphygmographic tracing? And who should have these at command, if not the physician? Yet it is not altogether the fault of the profession that they do not study these things, for the great American public has a fondness, not only for being humbugged, but for being drugged, and would not consider that it was getting its money's worth if it received a careful prescription for exercise instead of a Latin formula calling for expensive pills or nauseous mixtures. The time will come, however, when the physiology and the prescription of exercise will be a regular part of the medical course, and I am glad to say that there is a slowly increasing number of physicians who are recognizing the importance of these questions, and who are giving time and thought to them.

Physiological Effects of Exercise.—Before speaking of the therapeutic effects of exercise, let me touch upon some of its physiological effects upon the various organs and functions of the body.

The Cell.—Active exercise promotes the activity of the cell, the breaking down and building up of the protoplasm, the casting off of waste products, the taking on of new products,—the processes which, together, we call metabolism. The vigor of the cell is in proportion to the activity of these exchanges, and when they cease it dies. But the two processes must be in the right relation to each other. If activity—i. e., exercise—is in excess, the nutrition of the cell will be defective and waste will exceed repair, and if, on the other hand, activity is deficient, repair will exceed waste and an excess of material is laid up in the cell, which then, under conditions of unusual activity, will be easily broken down into substances which act as poisons. These processes are continually going on in all cell tissue. Nervous tissue is broken down and built up as we read, study, think, or write. Every function which the body performs produces the same results. Now, one-half the body, by weight, is muscular tissue, and it is mainly through the activity of muscular tissue that the metabolism of the body is kept up to the proper pitch.

Local Effects of Exercise.—What takes place in a working muscle? The local blood supply is at once increased, bringing with it more food and oxygen. Oxidation is increased, waste products, CO_2, urates, and uric acid are carried away, to be eliminated each by its proper excretory organ. When exercise is insufficient, unstable compounds are stored up in the muscle. Then when any unusual and violent muscular activity occurs the increased oxygen supply breaks down these compounds, which are poisons to the system, and which appear, in part at least, as a deposit of urates in the urine. In diseases which are characterized by the accumulation of urates and uric acid in the system, what more logical prescription could be given than judicious exercise? Idle muscle may thus be compared to stagnant water. The longer it stands the more of poison accumulates in it, and the less of oxygen there is; but the faster it moves the brighter and purer it becomes.

Effect on General Circulation.—I have spoken of the increase of local circulation. The general circulation, too, is quickened by exercise directly in proportion to the mass of muscle involved. Thus exercise of one arm, or even of both, affects the circulation much less than exercise of the trunk or of the lower extremities. The heart is a muscular organ, hence the results of exercise are the same upon it as upon other muscular tissue. For obvious reasons, the effects of exercise upon respiration are co-ordinate with those upon the circulation.

Effects of Exercise on Nervous System.—It is upon the nervous system, however, that modern investigators have turned their searchlight with the most marvellous results. Muscle considered alone, if that were possible, is a dead mechanism, like a cold locomotive. Exercise does make the mere machine a larger, harder, stronger instrument, but the nervous element is of vastly more importance, and a muscle that is in the habit of contracting will contract not only with greater force, but more quickly—the latent period is diminished. Now, just as muscular work increases the actual number of muscular fibers, so a more complicated

Digitized by Google

structure is produced in the nervous system of those who habitually exercise the muscles. "Dr. Luys, in his work on The Brain, has proved that after a limb had lost its function (as, for example, after amputation) certain parts of the gray matter underwent atrophy, due to defective action of the motor cells; hence if such an action can cause a want of development in these cells, it is but fair to conclude that exercise can increase the production and development of these cells. And since the brain is directly connected with the spinal cord, and the spinal cord with the nerves, it is fair to infer that the same development would take place in these tissues also."* But the development of cortical centers by special exercise is no longer a matter of inference, having been proved by repeated experiments.

Therapeutic Applications.—Thus far I have been speaking of physiological facts. Now, I wish to make some practical applications of the therapeutic value of exercise in cases which come to the constant notice of physicians. First, let me call attention to an important principle. In the words of Dr. Gulick: "One of the fundamental facts of evolution is that the performance of function tends always to an increased differentiation of tissue, with consequent improvement in the function itself."† Or, more briefly, "Function makes structure." This is many times applicable in relation to the problem of exercise.

Cardiac Troubles.—Certain forms of cardiac weakness and of valvular trouble have been successfully treated by graded exercise until the muscular strength of the ventricles is sufficient to compensate for stenosis. Since, as before stated, the work of the heart is directly in proportion to the mass of muscles at work, the remedy may be applied very accurately and increased very gradually. Hill climbing has been prescribed in many cases with great success.

Indigestion.—Many forms of indigestion would be benefited, if not entirely cured, by appropriate exercise of the abdominal muscles, quickening the circulation in the entire abdomen and stimulating peristalsis. And who questions the value of twisting, turning, bending movements of the trunk in cases of chronic constipation?

Respiratory Diseases.—Diseases of the respiratory system are specially amenable to exercise. It is not, by any means, that exercise is a cure-all for these troubles, but it is true that intelligently prescribed exercise would often effect changes in nutrition for which cod-liver oil is given. It is also true, in many cases, that if the same amount of outdoor air and activity were taken at home that is taken after an expensive change of climate the same good might be accomplished. Pure, fresh air, wherever found, is an active enemy of disease germs, and nowhere more so than in diseased lungs. The amount of fresh air and oxygen taken into the lungs will often determine the duration of the trouble, yet it should be remembered that no amount of purely voluntary deep breathing will increase oxygen consumption or oxidation. "Experiments show that an animal uses no more oxygen in an hour when made to breathe that gas in a pure state than when allowed to breathe ordinary air, * * * but the amount of oxygen used depends on how much he uses his lungs."* There are few persons with weak lungs, or in the beginnings of pulmonary trouble who cannot begin a mild and gradually increasing series of muscular and respiratory gymnastics. This, by necessitating deeper breathing, would increase metabolism and hence increase the oxygen consumption. In cases where strength is lacking for voluntary muscular movements, passive exercise may be employed with great, though not with equal benefit.

Physiological Fatigue.—Here is a suggestive statement from Dr. H. D. Wey, of the Elmira, N. Y., reformatory: "Errors of circulation, repair, and waste are more readily overcome by supervised exercise, bathing, and massage than through detention in the hospital and efforts at improvement through chemical therapeutics. * * * The man in the hospital, unable to work, but up and about, who sleeps at night because the lights are out and there is nothing else for him to do is not nearly so well off as the same individual placed in the gymnasium and a cell, and sleeping at night as the result of physiological fatigue."†

Gout and Rheumatism.—In gout and rheumatism exercise is especially valuable, in that it prevents the accumulation in the muscular system of those compounds which give rise to uric acid and the urates.

Deterrent Effects of Exercise.—Physicians might well give more thought to the deterrent effects of exercise where a local congestion is concerned. Many a headache would be relieved by vigorous muscular movement, withdrawing the excess of blood from head to extremities and cleansing the brain cells, by a rapid blood stream, from waste products. Many an incipient bronchitis, too, would be as efficiently checked by exercise, active enough to induce a perspiration, as by a hot foot bath and a Dover's powder.

[To be concluded in April number.]

TINNITUS AURIUM, if due to quinine, is nearly always relieved on the administration of atropin or belladonna.

PARSLEY TO CORRECT ONION BREATH.—If a sprig of parsley be dipped in vinegar and eaten after an onion, no unpleasant odor from the breath can be detected.

Central City, Neb., January 19, 1897.—You are certainly to be congratulated on the excellent journal you are furnishing to the profession. Yours truly, W. N. Hunt.

* Faries. A. A. A. P. E., Sixth Report, p. 53.
† Phys. Ed., Vol. II, p. 64.

* Martin, Human Body, pp. 412, 413.
† A. A. A. P. E., Eighth Report, p. 38.

Digitized by Google

Selected Article.

RETROVERSION OF THE UTERUS.*

BY FRANKLIN H. MARTIN, M. D.,
CHICAGO, ILL.

Retro-displacement of the uterus is one of the most important conditions which the gynecologist and the family physician are called upon to remedy in the treatment of female complaints. It is important because the condition frequently exists, because it produces a long train of symptoms which frequently end in invalidism, and because it is frequently ignored, if discovered at all, by physicians whose experience ought to teach them better.

Because the uterus is a movable organ; because it is behind the bladder, which must fill and empty, and in front of the rectum, which must distend and contract; because it is subject to the intra-abdominal pressure with every inspiration and expiration of the woman; because it is fixed with elastic and muscular supports which protect it from sudden jars; because of all this it does not prove that there can be no normal position of the uterus, and hence there can be no pathologic displacement. A man's arm has a normal range of movement in order that it may accommodate itself to its environment and perform its function, but that does not argue against a possibility of pathologic dislocation of the arm.

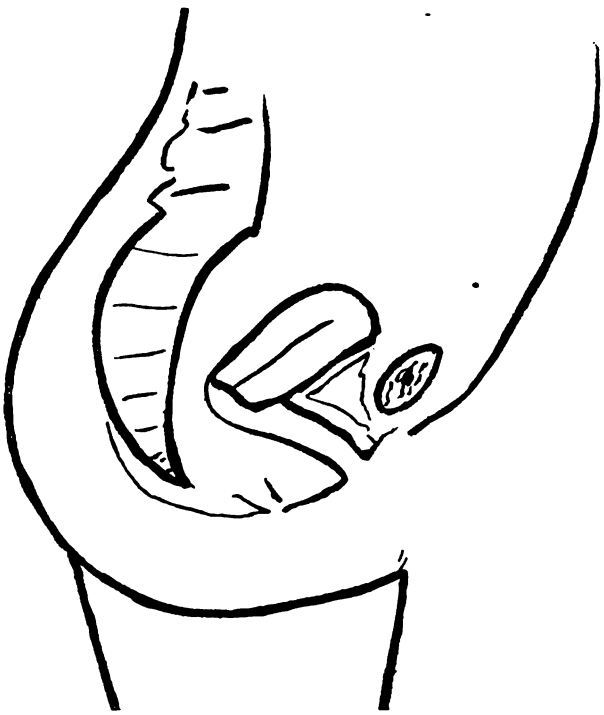


FIGURE 1.

APPROXIMATE NORMAL POSITION OF THE UTERUS.

In order to diagnose and treat a dislocation of the humerus, one most know the normal anatomy of the parts. While I have reason to believe that there are physicians of reasonable appearance who do not apply this same rule in the practice of pelvic disorders, I affirm that every family physician or gynecologist who depends upon his own knowledge for making diagnosis of pelvic difficulties should not only know pelvic anatomy, but should also be able, by repeated practice, to detect abnormalities.

The uterus, Fig. 1, in its normal location is suspended in the pelvis, with the fundus lying a fraction of an inch below a line drawn from the top of the symphysis pubis to the promontory of the sacrum. With the subject in the upright position the body of the uterus inclines forward on an angle of about 45 degrees with the horizon. The cervix lies within an inch and a half of the sacrum. The body of the uterus projects from the top of the vagina in a forward direction at about right angles to that muscular tube. The fundus of the uterus occupies such a position in the pelvis when normal that the intra-abdominal pressure deflected from the anterior abdominal wall strikes it just posterior to its crest in a direction to force it, if at all, in an anterior direction.

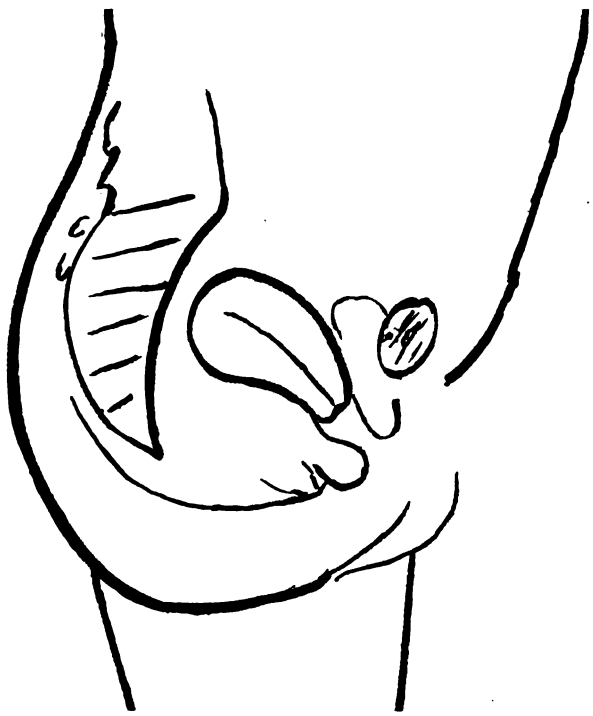


FIGURE 2.

The supports of the uterus are the broad ligaments, which suspend it with side expansions, the vaginal tube, resting upon the peritoneum, supporting the cervix, the two folds of peritoneum called the sacro-uterine ligaments holding the cervix near the sacrum, with the anterior vaginal wall, acting as a counterpoise, suspending it in front. The round ligaments act as stays, preventing the uterus from being forced into retroversion by sudden impulses or jars. So that it has supports from almost every point, and in no case are the supports immovable and fixed. It is surrounded with cushioned supports and elastic

*Address delivered before the Central Illinois Medical Association at Streator, December 1, 1896.

Digitized by Google

guys, while its free fundus is embraced in a canopy of soft, ever-yielding intestines. No organ in the human body is more carefully protected from violence from without, or from its immediate environment from within.

THE FEMALE PELVIS.

The female pelvis, upon which the destinies of the human race so much depend, is not only a box of wonderful security, but it is a stronghold of marvelous nervous mechanism. The uterus is connected with, and has extensive automatic control of, almost every organ in the body. No other organ except the heart has such universal sway over the whole economy. From the time that puberty begins, in early maidenhood, until the well-earned rest is secured at the menopause, the immense network of sympathetic nerves surrounding the uterus is ever ready to perform herculean tasks. If conception occurs it must automatically, at once, begin a work which is the most remarkable thing in the world. It compels the heart to send more blood for nourishment of its new life, it compels the brain to create an appetite in the individual, it compels the stomach to digest larger quantities of food, and the intestines to increase assimilation. It strengthens and expands the peritoneum, it softens the cartilage of the pelvis, it expands its own supports, it enlarges its environment without pathologic consequences, it develops the breasts and fills them with fluid, and when, at a certain hour on a certain day, the climax of gestation is reached, it touches the spring which sets in motion all of the awful machinery of labor, which contracts its own powerfully developed walls, relaxes and lubricates the soft parts through which the child must pass, compels abdominal contraction at the proper time, and when finally the labors are finished it telegraphs less blood to the pelvis, more to the breasts. It contracts its own walls, narrows its blood supply, furnishes an antiseptic fluid of soothing quality for the soft track of its outlet, and in a remarkably short time has returned to its normal size and position.

When we stop to think a minute of the wonderful accomplishments of this uterus, and realize that its functions of menstruation or gestation are constantly maintained for thirty years, it does not seem unreasonable that a displacement of the organ, with a consequent disturbance of its sympathetic nervous connection, will produce disastrous results.

Retroversion of the uterus produces local and remote subjective symptoms.

The local symptoms are produced by the disturbance the dislocated organ produces by pressure on neighboring parts. Constipation may result from direct pressure of the uterus on the lower bowel. Sacralgia or backache may be produced by direct pressure of the displaced fundus on the sacral nerves. This (displaced fundus) may draw upon the support of the bladder or the displaced cervix, from forward pressure, may, too, disturb the function of this organ. This displacement of the uterus frequently forms flexures of the broad ligaments, which intereferes with the return venous circulation of the organ and produces a passive congestion, with symptoms of heaviness. Pain in the ovaries and tubes may result from the same cause. The organ, from its increased weight, and from lying with its long axis parallel with the vagina (Fig. 2), slides into a lower plane of the pelvis and gives rise to the distressing

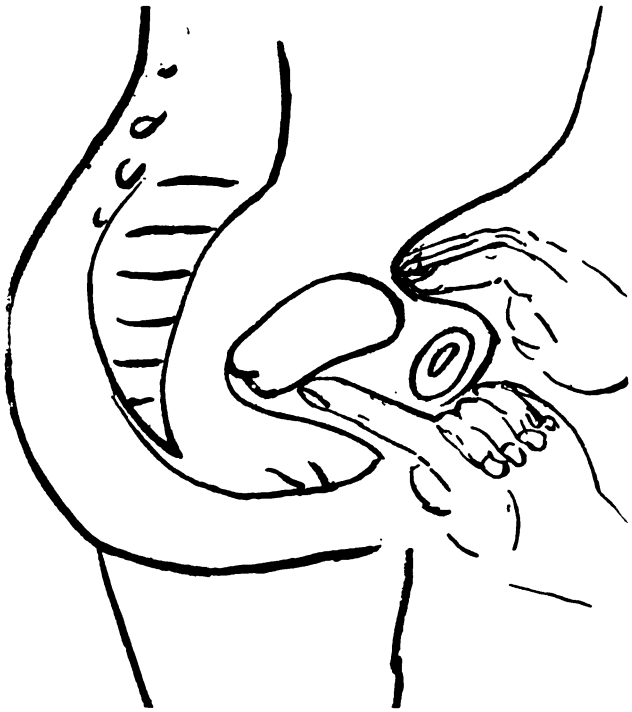


FIGURE 3.

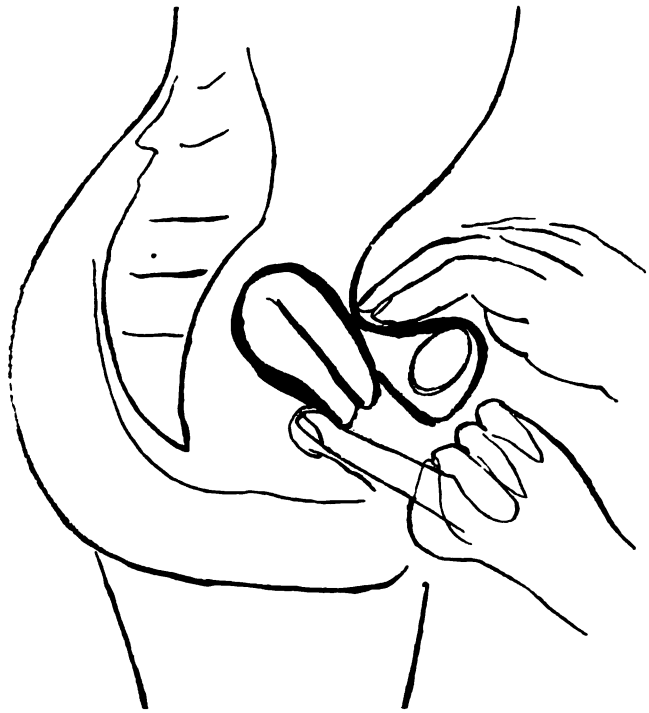


FIGURE 4.

Digitized by Google

symptoms of "bearing down." These symptoms are all aggravated by exercise of the patient and the upright position of the body, because these things exaggerate the displacement. Menstruation is invariably disturbed, and more or less pain is seldom absent.

Remote Symptoms.—The remote symptoms may be as multitudinous as the nerves which connect the organs of reproduction with other organs of the body. While the uterus in health has such positive influence on the functions of other organs, it is easy to understand how, when in distress, just this intimate connection might disastrously disturb the normal functions of these neighbors. Such is the case. Palpitation of the heart, poor digestion, nausea, intestinal disturbance giving rise to imperfect assimilation, bladder irritation, backache, and, almost invariably, severe headaches are a few of these symptoms.

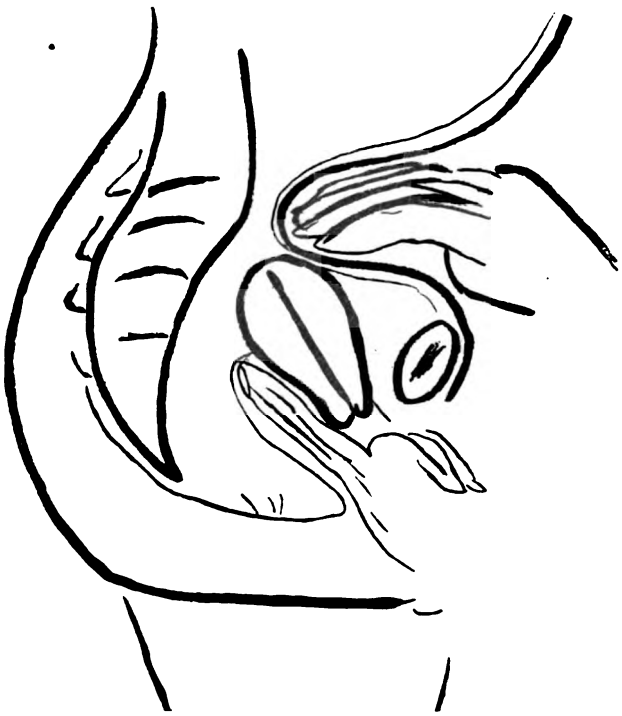


FIGURE 5.

General Symptoms.—After the suffering woman has been allowed to bear the constantly harassing symptoms from month to month, with the cause becoming more and more fixed, with poor assimilation, leading on to anemia, with rampant reflexes, gradually endangering the balance of the nervous system, we find the subject growing thin in flesh, we find her despondent in spirits, especially aggravated each month when the labor of painful menstruation is superadded, her will forces become less resistant to the nerve storms, hysteria supervening, and what was once a healthy woman is transformed into a thin, weak, white-skinned, aching, despondent, hysteric invalid.

Diagnosis.—While the subjective symptoms already rapidly recited must give us a clue to the local condition, it is the objective signs, as gained by an examination of the pelvic organs, which must make or confirm our diagnosis.

With a knowledge of the normal conditions well fixed in his mind, the physician should proceed to make a thorough examination of the pelvis. The patient is placed on an office table or a bed, with her legs flexed and her feet supported in a pair of stirrups, or on two chairs if the examination is on a bed. The examiner, with the index finger of his left hand well soaped or otherwise lubricated, standing or sitting close in front of the patient, between her separated knees, should proceed to make a vaginal digital examination, reserving the strong right hand for external palpation. In an instant he will determine, if the perineum is lacerated, whether the anterior or posterior vaginal walls are projecting. He immediately reaches the cervix. If it is well back in the pelvis, it would be well nigh impossible for retroversion to exist, because the overhanging sacrum would throw the fundus forward, and by placing

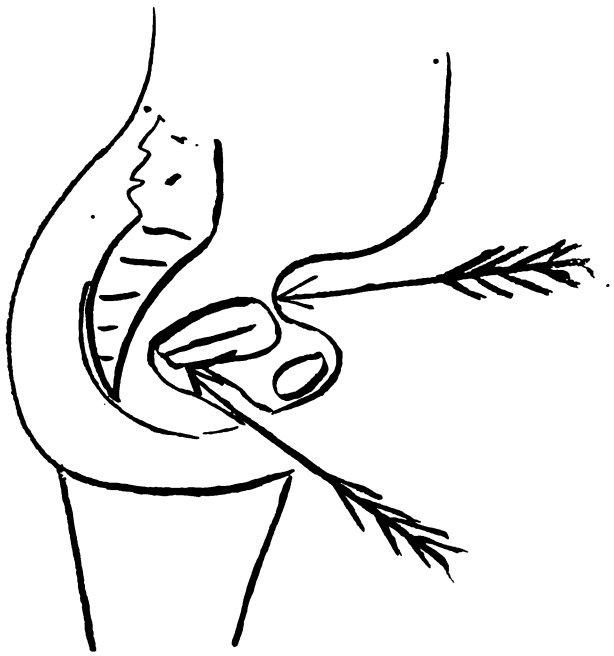


FIGURE 6.

the finger in front of the cervix it can be proved by grasping the fundus in front (Fig. 3). If the cervix is well forward and low in the pelvis, then look out for retro-displacement of the fundus, for then, by placing the finger in front of the cervix, the hand from above will approach it with no fundus to be felt between (Fig. 4). By placing the finger behind the cervix in such a case, if the fundus is retroverted it can be palpated in that position, thus proving conclusively that the uterus is retroverted (Fig. 5). While the uterus is grasped in such a position any irregularities of its surface, its size, and something in regard to the amount of its mobility can be ascertained. In fact, an expert in bimanual palpation of the pelvis can easily, by some such systematic course as described above, determine not only the position, shape, and size of the uterus, but also the condi-

Digitized by Google

tion of the appendages. If the parts are tender, or the patient a virgin, or the pelvic walls unusually resisting or thick, an anesthetic should always be given in order to accomplish a thorough examination. In fact, it should be followed as a rule that an anesthetic should be given when an examination without one leaves any doubt. Whenever the uterus appears fixed in retroversion an anesthetic should be given in order to confirm the diagnosis, as frequently an apparently adherent uterus becomes dislodged and movable under the relaxing influences of ether.

Treatment.—Without going more fully into etiology, more minutely into methods of examination, or into a more exhaustive study of the anatomy of the pelvis than the foregoing hasty discussion will allow, I must hasten to the more practical part of my subject, viz., treatment. And here, too, I can but touch on general principles, with the elucidation of but one or two important practical applications.

For the treatment of simple persistent retroversion, without adhesions or with laceration of the perineum or diseased appendages, two possible means of cure may be adopted.

Without Operation.—One cannot safely promise a cure in any case of retroversion without finally resorting to an operation, but after taking the precaution to explain to a patient before treatment is begun that non-operative treatment may fail, one is justified in making an attempt (with patients who can wait) to cure without operation.

The treatment here should be the replacement of the uterus and the retention of the organ in place by a well-fitting Hodge-Smith pessary, or the replacing of the uterus at each treatment by means of well-placed tampons, keeping them in position until just before the next treatment, and all this supplemented by a judicious application of local tonics and stimulants.

To be more exact, my method is as follows: I replace the uterus by bimanual manipulation, by forcing the cervix backward and drawing the fundus forward (Fig. 6). I then select a pessary which will lengthen the vagina, thereby keeping the cervix back in the hollow of the sacrum, and whose posterior bow will force the fundus forward.

I then place in the vagina a vaginal electrode and over the replaced fundus an abdominal sponge electrode, and apply a slow break faradic current of electricity, applying it as strong as the patient will bear without pain and for a period of five minutes. This stimulates all the muscular supports of the uterus, and that, too, when they are in a state of relaxation. The patient is then instructed to get into extreme knee-chest position three times a day, and when in that position to open the vagina so that it will be distended with air by retracting slightly with her finger the perineum. This reverses temporary intra-abdominal pressure, throws the uterus forward by gravitation, and forces the cervix into the hollow of the sacrum by ballooning the vagina with air. The patient takes the local stimulation of faradization three times a week, and at each time the uterus is examined to make sure that it remains in place. The surgeon should, by bimanual manipulation, stretch the shortened supports and force the uterus into extreme antiversion at each treatment. After a month's treatment the pessary is carefully withdrawn, the patient is instructed to avoid violent exercise, is cautioned to assume the knee-chest position religiously, in order to avoid a relapse, and to report the following day. At this time the parts are examined, and if the uterus has remained in place for the twenty-four hours without support, one should be much encouraged. The ordinary treatment should be applied and a two days' respite given. And so, carefully, these cases should be nursed, and about one out of five will reward you with a final cure.

Frequently after withdrawing the support the first time, at the next visit the patient will announce a failure, her symptoms having already convinced her of that fact. Another month or even two months' treatment should be advised.

If a well-fitting pessary will not be tolerated, then at the end of each treatment, after the uterus is well in position, the patient should be placed in knee-chest position, and with the aid of a perineal retractor and a pair of dressing forceps an elastic wood tampon should be placed in front of and below the cervix (Fig. 7). This should be allowed to remain until the following evening, when it

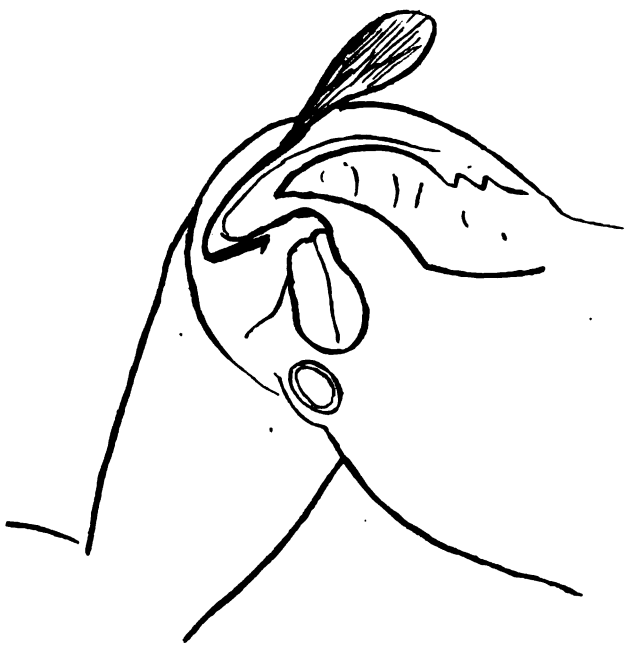


FIGURE 7.

should be removed by the patient and an antiseptic douche given. The patient should remember to assume the knee-chest position at least three times a day during the time she is receiving this treatment. All forms of violent exercise should be avoided and corsets should be abandoned.

Digitized by Google

These tedious forms of treatment will yield a gratifying result in about one case in five. This small percentage is well worth fighting for, however.

Alexander Operation.—What shall we do with the failures under this head of non-adherent but persistent retroversions? Unhesitatingly I say: Shorten the round ligaments. These cases require the slightest tension on the part of the round ligaments to make them permanently normal. The operation is safe and by my method of ligament fixation it is sure.

RETROVERSION WITH ADHESIONS.

Adhesions of a retroverted uterus without concomitant disease of the appendages is a rare complication. However, cases will occasionally be found where adhesions have occurred from destruction of the epithelium of the opposing peritoneal surfaces as a result of pressure and friction without the intervention of a septic process. These adhesions occasionally, I believe, I have been able to separate by manipulation under anesthesia. If they do not yield by one manipulation under ether, we may hope, by repeated massage, local stimulation of faradism, and hot water and depletion to cause frail adhesions to give way without operative interference. After once overcoming the adhesions the case should be treated exactly on the principles of those cases of non-adherent retroversions.

Adhesions of a permanent and unyielding character complicating retroversion, where there is not serious disease of the appendages, require more radical treatment. While, by an examination under anesthesia (and all of these cases should have such), one cannot invariably say that the appendages are not seriously diseased, it is possible for one of experience to arrive at a pretty satisfactory conclusion. If, then, posterior fixation exists, and the appendages, in the opinion of the surgeon, need not be sacrificed, he should proceed to break up the adhesions through the posterior cul-de-sac, after first cleaning the uterus with a curette, ascertain the true condition of the appendages, replace the uterus and retain it in position by shortening the round ligaments by Alexander's operation.

RETROVERSION WITH DISEASED APPENDAGES, WITH OR WITHOUT ADHESIONS.

Retroversion with diseased appendages, with or without adhesions, can, in my opinion, be successfully treated by laparotomy only. A small incision usually suffices. The uterus is sought for and the fundus freed by sweeping the finger between it and the adherent peritoneum. The diseased appendages are sought and treated by removal if necessary, or if simple cysts only exist they should be excised, disinfected, and drained, and then the uterus is brought well forward and suspended.

Method of Suspension.—I have adopted Fowler's method of ventral fixation, or a modification of his method when the urachus is absent. The urachus, which ordinarily may be seen lying parallel with the abdominal incision on the peritoneum in the subperitoneal space, is avoided in making the incision, and when the uterus is freed and ready for attachment the urachus is stripped from its surrounding tissue until a cord of two and a half or three inches long is obtained, then the umbilical end is severed, leaving it attached low down in the pubic end of the abdominal incision. The uterus is drawn well up into the abdominal incision, and the blades of a Cleveland forceps are passed from behind forward through the fundus, just posterior to its crest. The points of the blades are separated and are made to grasp the free end of the urachus, and by withdrawing the forceps the cord-like urachus is drawn through the top of the uterus. Now, by grasping the free end of the urachus, the uterus is slid along the ligament into extreme antiversion, well below the lower angle of the wound. An antiseptic catgut suture secures the uterus in place and the free end

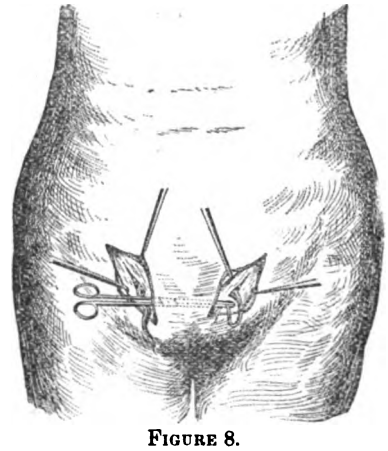


FIGURE 8.

of the urachus is buried in the whole length of the abdominal wound as the wound is closed with its permanent sutures. This succeeds in suspending the uterus on an animal living ligament taken directly from the surrounding tissues, and the fact that the cord-like tissue is again immediately reburied in succulent, well-nourished living tissues insures its integrity. The uterus, therefore, becomes successfully fixed without the intervention of any kind of an artificial permanent or temporary suture, which are always liable to become infected and give rise to troublesome fistulæ.

When the urachus is absent, or divided and scattered, as it occasionally is, I take a strip of peritoneum about one-half inch wide from the side of the incision, twist it into a cord, and, leaving the pubic end attached, I treat it exactly as I do the urachus. It is in every way as efficient as the urachus.

I have done these two operations at least thirty times within the last year, and in no case has there been the least tendency to weakness of support. I consider it superior to any other method I know.

Digitized by Google

THE AUTHOR'S ALEXANDER OPERATION.

With my method of doing Alexander's operation some of you are already familiar, as I published it over a year ago. It is unique only in the method of fixation of the ligaments. As in my ventral fixation operation, in fixing the shortened round ligament I do not cumber my wound with any permanent or temporary buried sutures. I make the ordinary incision from the spines of the pubes, two inches in length, in the direction of the anterior superior spine of the ilium, exposing the external rings (Fig. 8). I separate the rings and draw out the strong round ligament. I then pass the closed blades of an artery forcep from the lower end of one wound, beneath the skin, fat and superficial fascia, over the pubes to the lower end of the wound of the opposite side. I then open the closed blades of the forceps and grasp the freed end of the ligament of the farthest wound and draw it through to the other wound (Fig. 8). The two ligaments are then drawn taut and tied tightly together over the pubes in a strong hard knot. The free ends of the ligaments are tacked by means of antiseptic catgut to the ligament on either side, in such a way as to prevent the knot

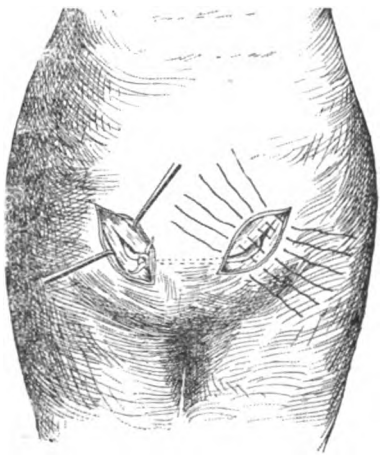


FIGURE 9.

slipping until adhesions have occurred (Fig. 9). This method of tying effectually and evenly shortens the ligaments, and the knot thoroughly fixes them without the necessity of resorting to any kind of objectionable permanent suture. The wound is then closed over the ligaments in the ordinary way with temporary silk-worm gut sutures.

SUMMARY.

1. Continuous retroversion of the uterus is a condition which frequently leads to serious pathologic consequences.

2. Retroversion without adhesions can be cured without operative interference in about 20 per cent. of the cases in which it occurs.

3. A small percentage of retroversion with adhesions can be cured by massage, electricity, and depletion.

4. Retroversion with unyielding adhesions should be freed through the Douglas cul-de-sac, and the round ligaments shortened at the same operation.

5. Retroversion with diseased appendages should be treated through an abdominal incision, and the uterus brought forward and suspended on the urachus or a ligament constructed of peritoneum.

6. When the Alexander operation is performed the ligaments should be secured without resort to a permanent buried suture, and this can best be accomplished by tying the two ligaments together in a hard knot, over the pubes, beneath the integument.—Journal of the A. M. A., February 20.

ITCHING AND THE ITCH.—In a recent number of La Médécine Moderne, the frequency with which formulæ are published in American medical journals for the relief of pruritus vulvæ is made a subject of comment. The question is asked whether there are peculiarities of race, climate, or environment which tend to make the affection so prevalent among American women that editors have become possessed of the necessity of bringing the matter forward so frequently in their publications. We do not know how others may account for the fact that pruritus vulvæ receives so much attention at American hands, but our itch editor, to whom we referred the matter, informs us that personally he is a great admirer of French journalism, and constantly flatters French editors in the sincerest way by imitating them. Now, as every one knows who reads the Paris journals, it would be considered an unpardonable oversight for an editor to send out a weekly issue which did not contain the recipe for at least one pommade contre le gale.

Having little or no scabies in this country, and much more pruritus scribendi than any other variety, these formulæ are reproduced and made to do service under the faked caption of "pruritus vulvæ."

Now, will our esteemed friend of "modern medicine" enlighten us upon the prevalence in France of la gale, to which his own and his contemporaries' journals devote so much attention?—Medical Record.

Lexington, O. T., January 18, 1897.—Editor WESTERN MEDICAL REVIEW: Please find money order enclosed in payment for your valuable medical journal for 1897. To say I am well pleased with same would be putting it mildly. I most heartily endorse the stand you have taken in regard to advertisements. It is certainly gratifying to read an article on medicine or surgery of a few pages without coming in contact with as many pages of glaring advs. I am glad that you gave Dr. Byron Robinson what you did. Such schools as he defends can be none other than a fraud in every sense of the word. I think your journal deserves the support of every conscientious and true physician in the western states. With best wishes for your success, I am, yours truly, Robert E. Thacker.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$2 00
Single copies..... 20

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, MARCH 15, 1897.

THE semi-centennial meeting of the American Medical Association, which meets in Philadelphia on June 1, will probably be the most interesting of any which has occurred during the fifty years of its existence. There will be a larger number from Nebraska than usual, and it is probable that by uniting together specially good rates and through cars can be obtained. For this reason, the editor of the WESTERN MEDICAL REVIEW requests all who are thinking of attending the meeting to send him their names; also to state whether they would be willing to accommodate themselves to the party in returning, or would prefer to return independently. It is quite likely that in uniting with delegations from other western states a very cheap and enjoyable trip could be arranged. Send your names as soon as convenient.

CHILBLAINS AND URTICARIA—THEIR RELATION TO MODERN PATHOLOGY.

Dr. A. E. Wright, of the Army Medical School at Netley, has been publishing a series of papers in the London Lancet, in which he gives the result of extended and apparently carefully conducted experiments and observations on the etiology and pathology of chilblains and urticaria. His investigations, however, covered a much wider field, including a study of the pathology of a group of diseases characterized by a "serous hemorrhage," a group to which the above mentioned ailments belong. He seeks to show that the increased transudation of the blood fluids into the tissues occurs in persons who suffer from a defect of blood-coagulability. The doctor adduces evidence to show that this condition obtains in chilblains and urticaria,—two diseases that are apt to give the physician, as well as the patient, much trouble. The stubborn way in which they yield, or refuse to yield, to treatment often discourages both patient and doctor. This is especially true if the doctor himself happens to be the patient as well, as is not infrequently the case. With this fact in mind, to say nothing of their concern for the welfare of others, it will be understood why any light upon the pathology and etiology of these conditions, and especially such light as will lead to rational and effective treatment, either curative, or, better still, prophylactic, will be hailed with delight by a long-suffering profession.

The investigator found that in ten cases of chilblains the period for the coagulation of the blood was greater than normal. In one mild case, in a child,—age being a predisposing cause of chilblains and urticaria, the young being most susceptible to attacks,—the period was only slightly increased, but in the others it was decidedly so. What is true of chilblains is also true of urticaria. Those suffering from one are markedly susceptible, or predisposed, to the other.

The group of diseases characterized by serous hemorrhages, it should be remembered, is not limited to the two above named, but includes a number of others, among which may be mentioned epistaxis, chronic malarial cachexia, with a predisposition on the part of those of the lymphatic habit, as well as those of a hemophilic family—the so-called bleeders—all of whom suffer from a defect of blood-coagulability. However, it is chilblains and urticaria, we imagine, that will oftenest, if not most, interest our readers. Every practitioner is called upon so frequently to relieve these conditions that almost any one will be able to recall, in his own practice, cases in which the same patient is subject to attacks of both these diseases, thus substantiating the author's doctrine.

As to the etiological causes, aside from chronic malaria, the lymphatic habit, and the bleeders, a group that we are not considering in detail, the ones that most interest clinicians are those that tend to lessen the coagulability of the blood. Foremost among them are such foods as absorb the lime salts from the blood, making it less coagulable, such as shell-fish, acid fruits, and the like.

Assuming the correctness of the etiology of these ailments as set forth by the author, the rational preventive treatment would consist in the withholding of everything that tends to lessen the coagulability of the blood, such as alcoholic stimulants, or the ingestion of large quantities of

Digitized by Google

water, and, above all, of shell-fish or sour fruits. As the prevention of disease is better than its cure, particular stress should be laid upon prophylaxis in these cases, for it is in the diseases under consideration that such procedure seems most promising of results. When, however, the pathological condition actually exists, as is usually the case when the medical man is consulted, there is but one course open, and that is curative medicine, given with a view of correcting the mischief. The rational treatment is again indicated by the etiology and pathology. The blood should be supplied with those elements of which it has been deprived, or, in other words, with those that increase its coagulability. This, it is claimed, may be done by exhibiting lime salts. The particular salt recommended by Dr. Wright is calcium chloride, with which he has had the most gratifying results.

MEDICAL LEGISLATION.

Senate file No. 263 practically met its fate in the senate March 1, when it was referred back to its committee by the committee of the whole. It came up for action the week previously, but was postponed to the above date, to give those opposed to it a chance to be heard. A large number of the regular profession attended the senate that day to urge its adoption, between twenty and thirty coming from Omaha, and every part of the state was represented. The bill is the same one that was introduced by the homeopaths two years ago, and was gotten up by one of the leading men among those who opposed it this year. It is the most liberal, as far as recognizing different schools is concerned, that was ever introduced in any legislature. It gives the homeopaths and eclectics the same number on the board of examiners as it gives the regulars, when the latter outnumber the former nine to one. Why the homeopaths opposed it the Lord may know, but we doubt very much if any one else does, and especially they themselves. The eclectics who were present and who have been heard from were almost unanimously in favor of it. An exception to the latter statement, of course, must be made for the few eclectics connected with the so-called Lincoln Medical College, which claims to be eclectic, and might as well claim to be anything else, as far as the make-up of its faculty is concerned. The gentlemen connected with this school, of course, opposed it, for they feared that few of its graduates would be competent to pass the examination of any examining board.

One of the leading homeopaths of the state, and a member of the legislative committee of the Homeopathic State Medical Society, emphatically expressed himself and said he was ashamed of his school if the few who opposed the bill at Lincoln really represented the majority, which he very much doubted. The puerility of the arguments used against the adoption of the bill was only equalled by their mendacity. The old argument that it was in the interest of a medical trust and ring reverberated from wall to wall in the capitol building, until those who used it must themselves have finally come to the belief that it was truth. But the bill was killed, for that is practically what it meant when it was referred back to the committee. It may be resurrected, and so may the millennium come.

Before this year, twenty-three states had medical examining boards, and this year nearly all of the states which have not already adopted this idea have bills in their legislatures for this purpose. Illinois, from present appearances, will adopt its new law. Wisconsin, in spite of all the fight that is being made against it, will probably stop being made the dumping ground for quacks and charlatans. Colorado had a board which examined under certain conditions, but has a bill in her legislature which, if adopted, will put her in the front ranks, with a strong law demanding examination for all physicians who enter her borders. Dr. Axtel, of Denver, writes us that it has passed the senate, and that it will probably pass the house, as there is very little opposition. Last month we printed an abstract of the proposed law in Iowa. Under date of March 8, Dr. J. F. Kennedy, of Des Moines, writes us that the committee on public health in the senate and house think it will pass, but says that the legislature has been flooded with documents from the Medical Liberty League, still he thinks this is rather a benefit, as it shows the character of the opposition. Dr. Kirkpatrick, secretary of the Kansas State Board of Health, under date of March 9, says: "The bill entitled 'An act to regulate the practice of medicine and surgery, and to control the use of nostrums and appliances,' was killed in the house yesterday. Therefore, we stand no show whatever of getting any medical legislation this season." Poor Kansas! But Nebraska is with you. The rich men, the investors, and practically everybody else has gone back on us; but, thank heaven, we can look for some immigration. The half-educated doctor, with his diploma from "a regularly chartered

Digitized by Google

medical college," will help to swell our numbers. And then just think of it, if the bill had become a law it would prevent DOCTORS WITH MONEY locating among us. (Honestly, dear reader, this was one of the great arguments used before a body of intelligent men.)

SIR SPENCER WELLS.

Another of the great lights of the medical profession of England and the world went out the other day, when Sir Thomas Spencer Wells died. He was born February 13, 1818, and died January 31, 1897, so that he was within four days of being seventy-nine years of age. Sir Spencer Wells was one of the few men who formed that galaxy of bright stars in the medical profession that has put surgery, especially abdominal surgery, in the advanced position it has taken in the last quarter of a century. In his early youth he showed great aptitude for the natural sciences, and early formed the determination to become a member of the medical profession. In 1841 he passed the examination and became a member of the Royal College of Surgeons of England, and joined the naval medical corps. For the first six years after obtaining his M. R. C. S. degree he was stationed in the naval hospital at Malta, but, tiring of this life, in 1848 he left the navy and went to Paris, with a view of perfecting his studies in pathology. Magendie and Claude Bernard were then among the great teachers of Paris, and the prominent thinkers and experimenters in that city were attracting medical men and students from all parts of the world. Returning to London in 1853, he settled down to practice, and soon obtained considerable reputation in obstetric work, although he devoted considerable time to ophthalmic surgery, and it looks now as though it were pure chance that he did not take up the eye as a specialty. But becoming attached to the Samaritan Free Hospital for Women and Children in 1854, he began more and more to turn his attention to the diseases of women. At this time the Samaritan was little more than a dispensary, there being no accommodation for in-patients. He remained with this institution throughout his life, and its reputation was made as much by Sir Spencer Wells' work as all others, probably, put together; and while he helped to build up the reputation of the Samaritan Free Hospital, the work he did there helped him to build up his reputation. He became editor of the Medical Times and Gazette about this time. The man who was creating the greatest influence for the future in abdominal surgery was Mr. Baker Brown, the most abused, the most hated man, without cause, of the time. Wells, becoming acquainted with Brown, was greatly influenced by his work and thought. In 1854 he assisted Baker Brown in his—Brown's—eighth case of ovariotomy, which was the first time that Wells had ever seen the operation. The result of this, like that of six others of Baker Brown's first nine cases, was not encouraging to the future abdominal surgeon, for the case died. It was after performing this operation that Mr. Baker Brown for a time gave up all hope of introducing it. Three years later—in 1857—Spencer Wells, then forty years old, himself attempted the operation, and he did it contrary to the advice of his friend, Brown, who assisted him. This case died, but Wells was not discouraged, and in the following year he performed a second operation, which resulted successfully. In twenty years from that time he reported the completion of 1,000 ovariotomies. The history of ovariotomy and abdominal surgery from this time on is well known, and there can be no one doubt that the large number of abdominal sections performed to-day is due more to the work done by Sir Spencer Wells than by any other man.

Soon after this, and when Wells was turning his attention and all his energies to gynecology, but especially to ovariotomy, the Crimean war broke out, and he abandoned his work in London, went to Smyrna, offered his services, and became connected with the British Civil Hospital. Here he saw a class of injuries that was new to him, and the opportunity of attending to many abdominal wounds gave him the experience which, he stated afterwards, proved to him that the peritoneum would stand much rougher handling than was supposed possible before this, and when he returned to civil life it was with more courage and more hope of success in abdominal work than when he left it. Sir Spencer Wells has been a voluminous writer, mostly on the subject of abdominal surgery. His first book, published in 1865, on the Diseases of the Ovaries, was the first practical work on this important subject, and was the foundation for many works of like nature by Wells and others.

Some years ago Sir Spencer Wells purchased the old David Garrick estate, Golder's Hill, a beautiful place of forty acres, about a half hour's ride from Grosvenor street, London, where his consulting rooms were. His wife died in 1886.

Digitized by Google

He leaves six daughters and one son, Arthur Spencer Wells, who succeeds to the baronetcy. Sir Spencer Wells' body was cremated at Woking.

Personally Sir Spencer Wells was unassuming, generous, and kind, and while not aggressive as a controversialist, he never allowed the gauntlet to lie long at his feet, but picked it up and fought to the end for what he believed to be right. And to do the work he did, in spite of all the opposition that was against him and his work, required more courage and determination than is possessed by the majority of men. He conquered his foes and traducers by publishing his failures and their causes, as well as his successes. He was loved by all who knew him, his honesty of purpose and good-natured candor turned his foes of yesterday into friends of to-day. It was the privilege of the writer to become personally acquainted with Sir —then plain Spencer—Wells in 1883, and the influence of the man was such as to leave an impression of almost reverence towards him.

Notes and News.

DR. J. S. BROWN died in Denver, February 4, of consumption. Dr. Brown went to Denver from Dayton, Ohio, on account of the disease which finally carried him off.

DR. W. P. SMITH has removed from Gothenburg, Neb., to Salina, Kan., where he has formed a partnership with Dr. W. B. Smith, and the two are now running the Salina Sanitarium.

PROF. WM. H. PANCOAST, who recently died in Philadelphia, directs in his will that his museum of anatomy and surgery be given to the Medico-Chirurgical College of Philadelphia. He also gives to the same institution $600 per annum.

THE resolutions adopted at the meeting of the State Board of Health, March 4, and which will be found under the proceedings of the board, have the right ring. We hope the board will not stop at passing resolutions, and we believe they will not.

DR. J. W. COKENOWER, secretary of the Iowa State Medical Society, writes that about seventy-five of the Iowa physicians are going to Philadelphia about June 1, to attend the meeting of the American Medical Association, and hopes Nebraska will join them.

DR. H. B. WHITNEY, of Denver, writes us that in making an abstract of his paper on "Colds" we copied an error that occurred in the printing of the original paper. At the bottom of the first column, page 51, of the February number of the REVIEW read one-sixtieth of a grain of atropin instead of one-sixteenth.

THE Keeley law of Wisconsin, which permitted the courts of that state to commit drunkards to a Keeley institute for treatment, and for which the people had to pay, has been declared unconstitutional. And so this fake is gradually passing. What will be the next one?

THE Ohio Medical College some time ago united with the University of Cincinnati, and it is now in a quandary. As a part of the university, it will be compelled to take colored students, which has always been contrary to its policy, many of its students coming from the south.

THE Japanese have organized a preparatory school of medicine in San Francisco, which means that a Japanese medical college will soon follow. The first class in this school just organized numbers sixteen. Let the good work go on, and, above all, let us have a Chinese medical college next.

THE late reports from India go to show that the serum treatment of the plague is proving a success. The rapidity of recovery, after use of the serum, in some cases is remarkable. While convalescence without the use of serum is very slow, with its use it is very rapid. As in the serum treatment of diphtheria, the earlier it is used, the more sure its effect for cure. Used even in apparently the last stages, the cures are reported as 50 per cent.

J. PIERPONT MORGAN has given the munificent sum of $1,000,000 to the New York Lying-In Hospital. This money is given to put up the building, on condition that the donor shall have assurance that, when completed, the hospital shall have sufficient funds to continue its work. Wonder if the time will ever come when one of the expenses of running a hospital will be the payment of the most important labor which is rendered, that of the physician and surgeon?

THE population of Kansas is decreasing, but the number of cases of insanity is increasing. The question arises, does the same cause which accounts for the depopulation account also for the increase of insanity? In 1890 the two insane asylums had 1,127 patients, but a recent report puts the number at 1,736. This does not include those who are being kept in poorhouses and taken care of privately, and these are reported to be many more than six years ago. This is an increase of over 40 per cent., but the population has decreased about 7 per cent.

THE following story is vouched for by a London paper, and is appropriate to the time. Possibly, if there is any truth in the story, and it sounds plausible, Lord Lister at that time had in mind the theory which he afterwards developed, and possibly when he asked the question, "How is this?" he was already partially prepared to answer it. While going his rounds in the Glasgow Royal Infirmary one day, Mr. Lister came to the

Digitized by Google

bedside of a patient whose arm had been severely crushed without the skin having received any injury. Turning to the assembled students, he said: "Gentlemen, I have frequently noticed that when severe injuries are received without the skin being broken, the cases nearly always recover. On the other hand, trouble is always apt to follow, even in trivial injuries, when a wound in the skin is present. How is this? I cannot help thinking that the man who is able to explain this problem will be one who will gain for himself undying fame."

A CERTAIN physician, living in the northern part of Nebraska, recently sent a bill for services rendered, and a few days after received his bill back, endorsed as follows:

Dear Sir: This notice was put in my box, and opened by mistake. The party has been dead for about three months, and is no relation to me whatever. It is strange how a doctor's conscience will allow him to dun the dead. You must live a better Christian life, and live and let live, and try and meet this lady in heaven, which is worth more than $41.50 to any doctor.

Respectfully, ————.

DR. CLAYTON, of Evanston, Ill., recently sued a patient for $2,000 for eight days' constant attendance, and was awarded $800, the judge saying that $100 per day was a fair remuneration. Dr. N. C. Wood, of Philadelphia, sued for $3,600 for twenty-four days' constant attendance, and that judge awarded him $1,000. While most of us would be satisfied with this much remuneration, these fees are not a drop in the bucket compared with what these judges and other lawyers are getting. Lawyers, for saving paltry dollars, get handsomely rewarded, but those who save the life of the man who owns the dollars must accept whatsoever these lawyers say.

A BILL has been introduced in the New York legislature declaring that no drug, medicine, or mixture of drugs, herbs, or medicines, commonly known as patent or proprietary medicine, shall be sold, offered, or exposed for sale in that state, unless an analysis or formula of the contents thereof has been filed in the office of the State Board of Health, and a certificate issued by such board that, according to the ingredients thereof, as indicated by such analysis or formula, the sale and use of such patent or proprietary medicine for the purpose for which the same is advertised, or the purchase thereof solicited, will not be dangerous to the public health. Every such analysis or formula filed in the office of the State Board of Health shall be preserved as a record of such board, but shall not be open to public inspection, nor shall the contents thereof be revealed by any member of such board, officer, agent, or employe thereof, except for the purpose of a criminal prosecution as provided by the act.

A LITTLE while ago we received a very nicely written letter from a gentleman in Chicago, whose name has appeared quite often in the daily press as the promoter of the wonderful remedy, Bracelin's Bactericide. The letter contained a request asking us to publish the article enclosed. The letter also contained a promise that if we would do so, we should be among the first to be remembered in the near future, when good paying ads. would be given to the obliging papers which should comply. The enclosure was a copy of a letter published in one of our leading medical journals, written by the great inventor of the Bracelin remedy. In it he extolled the virtues of his "Bactericide," and placed himself by the side of Pasteur, Koch, and other great men of the day. Why the journal referred to should have published this letter,—which was a great big puff for a great big fraud,—is more than we could then understand, and now, why certain medical journals should grab at the bait offered and publish it again, is still more astonishing. While the WESTERN MEDICAL REVIEW wants good paying advertisements, it is not so desirous of them as to lend itself to such schemes. Meanwhile, advertising this wonderful remedy to the people direct has evidently not been as successful as was desired, and so the medical profession will be "worked," through advertisements in certain medical journals.

Miscellaneous.

NIGHT sweats of phthisis can be checked in the great majority of cases by doses of twenty or thirty drops of the fluid extract of hydrastis, one, two, or three times daily.

APPENDICITIS.—Mr. Mayo Robinson read a paper with the above title before the Medical Society of London, published in the Lancet of December 19, on a series of cases of perforating appendicitis associated with general peritonitis, in which he related in detail six cases of general peritonitis on which he had operated during the past year, five of which had recovered after free lavage and drainage of the abdomen. He also referred to all cases of appendicitis on which he had operated during the same period, twenty in number, out of which nineteen had recovered He said that he preferred to adopt the simple classification of acute and sub-acute, or, what amounted to the same thing, catarrhal and suppurative, rather than the more complicated classifications advocated by several surgeons. He thought the most important points to settle in any given case of appendicitis were whether or not operation ought to be done, and if so, when? He thought the method advocated in America, of operating as soon as appendicitis was diagnosed, would lead to a far greater percentage of recoveries than the method of individualizing, which is adopted in England, because, not only his own experience, but that of

Digitized by Google

many other surgeons, had indubitably proved that the removal of an appendix before suppuration, perforation, or gangrene had occurred was practically unattended by risk and the operation could be done through a small incision by separation, rather than division of muscular fibers, thus avoiding subsequent inconvenience from hernia. Catarrhal appendicitis was the variety which furnishes the recurrent form, and these were the cases that, as a rule, recovered without operation. He referred to one of his cases which showed that, whilst the first and second attack may be catarrhal and end in resolution, the third may assume the perforative form, ending in general peritonitis. Hence, in the catarrhal form he advocated operation after a second seizure, as, should a second attack occur, it was almost absolutely certain that other seizures would follow. In the suppurative form, which might occur with or without perforative, or with or without gangrene, he thought operation ought always to be advised at the earliest possible moment. He said that he had never regretted operating, but he could point to several cases where delay at the request of the patient or his family had led to a fatal termination. He remarked that he always looked on an acute onset, with a rapid pulse and tenderness over the appendix, without the presence of tumor, as indicating need for immediate operation. A more gradual onset, with a quiet pulse and the early formation of tumor, were signs that delay might be safe. If, in the course of an appendicitis in any stage, a rigor ,with rise of pulse or temperature, should occur, operation ought to be advised, as it indicated septic absorption. The temperature alone he thought of very little assistance, the pulse being the true guide for treatment. Opium might so disguise the pulse rate as to lead to serious or even fatal delay, so that it should be avoided if possible; or if an opiate had to be given it might be advisable for the surgeon to reserve his opinion for a few hours, until the sedative effect had subsided, when, if the pulse had increased in frequency and anxiety of countenance had declared itself, operation would be advisable. Relief or cessation of pain, with a marked rise in the pulse-rate, he thought an indication for immediate operation, as it not infrequently indicated gangrene. Distention of the abdomen, with vomiting and rapid pulse, were signs that admitted of no delay, as they indicated extending or general peritonitis. Speaking as to the time when operation should be done, he thought the quiescent period, as advised by Mr. Treves, was best in the sub-acute or catarrhal form, and in the acute variety the earlier the operation was done the better. With very few exceptions the diseased appendix should be removed, as if it was left it was apt to excite fresh attacks, as shown in several cases in his list. The appendix might be removed safely in many of the suppurative forms if the abcess cavity was thoroughly evacuated and cleansed before making the search, as the appendix was usually either in the wall of the abcess or even lying in the abcess cavity; it could then be easily taken away without seriously disturbing the adhesions, and even if the adhesions were broken down and the cavity had been cleansed no harm, as a rule, followed, though he did not advocate a prolonged search if the appendix was not readily found. Speaking of general peritonitis associated with appendicitis, he said that we ought to give the patient a chance, even in the most extreme cases. He advocated in such cases very free irrigation of the abdominal cavity with plain boiled water or weak boric lotion, afterwards employing free drainage by several large rubber tubes.

PUERPERAL ECLAMPSIA: ITS ETIOLOGY AND TREATMENT.

Dr. William Warren Potter, of Buffalo, read a paper on the above subject at the ninety-first annual meeting of the Medical Society of the State of New York, Albany, January 26, 1897.

He said that we seem to have arrived at the renaissance of eclamptic literature; that while the subject is being discussed in magazine articles and societies, it would not answer for this society to keep silent.

Though the pathogenesis of eclampsia is still unsettled, we are certain that it is a condition sui generis, pertaining only to the puerperal state, and that to describe, as formerly, three varieties—hysterical, epileptic, and apoplectic—is erroneous as to pathology and causation, as well as misleading in treatment.

The kidney plays an important office in the economy of the eclamptic. If it fails to eliminate toxins, symptoms are promptly presented in the pregnant woman. Renal insufficiency is a usual accompaniment of the eclamptic state. Overproduction of toxins and underelimination by the kidney is a short route to an eclamptic seizure. However, many women with albuminuria escape eclampsia, and many eclamptics fail to exhibit albuminous urine.

The microbic theory of eclampsia has not yet been demonstrated. The toxemic theory, in the present state of our knowledge, furnishes the best working hypothesis for prevention or cure.

Treatment should be classified into (a) preventive, and (b) curative. The preventive treatment should be subdivided into medicinal and hygienci; and the curative into medicinal and obstetric. A qualitative and quantitative analysis of the urine must be made at the onset. If there is defective elimination, something must be done speedily to correct a faulty relationship between nutrition and excretion. One of the surest ways to control progressive toxemia is to place the woman upon an exclusive milk diet. This will also serve to flush the kidneys and thus favor elimination. Distilled water is one of the best diuretics; it increases activity and supplies material—two important elements. In the pre-eclamptic state, when there is a full pulse, with tendency to cya-

Digitized by Google

nosis, one good full bleeding may be permissible, but its repetition should be regarded with suspicion. If there is high arterial tension—vasomotor spasm—glonoin in full doses is valuable.

When eclampsia is fully established, the first indication is to control the convulsions. Full chloroform anesthesia may serve a good purpose. If the convulsions are not promptly controlled the uterus must be speedily emptied. This constitutes the most important method of dealing with eclampsia. Two lives are at stake, and by addressing ourselves assiduously to speedy delivery of the fetus we contribute in the largest manner to the conservation of both.

Rapid dilatation, first with steel dilators, if need be, then with manual stretching of the os and cervix, followed by the forceps, is the nearest approach to idealism. Only rarely can the deep incision of Duhrssen be required. Cesarean section should be reserved for extreme complications, as deformed pelvis, or to preserve the fetus when the mother's condition is hopeless. Veratrum viride is dangerous, uncertain, and deceptive in action.

In eclampsia of pregnancy, i. e., prior to term, the aseptic bougie, introduced to the fundus and coiled within the vagina, may be employed to induce labor. Finally, to promote the elimination of toxic material, diuresis, catharsis, and diaphoresis should not be forgotten; neither should the hot air bath, nor the hot pack, be overlooked.

THE STRYCHNIA CURE OF ALCOHOLISM AND THE OPIUM HABIT.

By CHARLES L. DANA, M. D.

A certain proportion of the submerged 4,000 who pass yearly through the alcohol wards of Bellevue Hospital distinctly and seriously wish to have a treatment given them which will take away their tendency to periodical sprees. Consequently the use of strychnia and the solanaceæ with certain adjuvant tonics and moral influences is employed in these cases. The technique of the treatment as arranged by myself has been carried out most skillfully and improved in its details by my house physician in charge of the alcohol cells, Dr. J. D. Brown. I am greatly indebted to him for the intelligence and faithfulness shown in his work among this class. The drugs selected for use in this "cure" are those which the experience of ten years in the care of these cases has shown me to be most useful.

The suggestive and moral influences thrown about the "cure" are borrowed, I freely admit, from the Keeley and other alcohol cures of the country.

Selected patients, after having passed through an attack of acute alcoholism and are convalescent, are allowed to remain two days and take the "cure." The wards of the hospital are not large enough to admit of a longer stay. Only persons who have reasonable intelligence and who show real evidence of sincerity are chosen.

The following solutions are used:

I.

℞ Strychninæ nitrat. . . gr. 1-15.
Atropinæ sulph. . . . gr. 1-300.
Aquæ destillat . . . m x.

M. Sig.—Inject t. i. d.

First-day injection.

II.

℞ Strychninæ nitrat. . . gr. 1-20.
Atropinæ sulph. . . . gr. 1-200.
Aquæ . . . . . f℥ x.

M. Sig.—Inject t. i. d.

Second-day injection.

III.

℞ Tinct. cinchon. comp. . m xv.
Tinct. capsici . . . m ½ to m j.
Tinct. solan. carolinei, . m ij.
Vini ferri amari . . ad f℥ j.

M. Sig.—Mistur. stomachic, f℥ j t. i. d. Shake.

Order: One-half to one glass of milk (hot or peptonized), alternating with hot beef tea or broth, every two hours.

IV.

First and second nights, if needed.

℞ Potas. bromid. . . . gr. xxxij.
Chloral hydrat. . . gr. xvj.
Tinct. valerianæ . . ℥ j.
Aquæ . . . . ad ℥ iv.

M. Sig.—f℥ j dose, repeated once, if needed. Shake. Mistur. sedativ.

The patients are given the injections I and II and "stomachic," III, three times a day, with abundant nourishment, washing out the stomach, if necessary, to help any catarrhal disturbance.

The patient, during the treatment, is made to understand distinctly that he is taking a "cure," with all that that implies, but no mystery is made of its character or of the means used.

After the second day he is perforce discharged. In most cases his craving is gone, but this generally occurs after a debauch. In fact, the natural history of many cases of periodical alcoholism is that craving ceases after the spree for from one to nine months.

On being discharged the patient is given—

℞ Tinc. columbo . . . ℥ j.
Tinc. capsici . . . m xv.
Tinc. nucis vomic. . . ℥ j to ℥ iss.
Apomorphinæ . . . gr. 1–3.
Tinc. cinchon. co. . . ad ℥ iv.

M. Sig.—f℥ j t. i. d. in water after meals.

The patient is told to take this and report weekly. After a month he reports monthly and is kept supplied with the bottle, which he is told to take the minute any craving develops and report at once.

By the application of this method to alcoholics we are able to send out many patients with hope

Digitized by Google

in the future, confidence in themselves, and a staff upon which to lean in this weakness. The same treatment when applied to patients with the morphine habit, has to be given much longer, and sometimes must be modified, by adding bromides, or gradually reducing the morphine. Dr. Brown was able in one case to stop immediately the use of morphine taken to the extent of thirty grains a day. The patient did not suffer in the least.—The Post-Graduate.

Correspondence.

MEDICAL LEGISLATION.

Editor Western Medical Review: For months almost every medical journal has had something (either editorial or correspondence) on the improvement of our medical laws, and the whole theme of nearly all is to establish a state board of examiners, and require all medical men who wish to practice in the state to take an examination before said board.

This is a step which has the appearance (in some respects) of being an improvement. But is it an improvement? I believe what we need is legislation that will look after our medical colleges, and see that their instruction and examinations are conducted in such a manner that only those entitled to the degree of doctor of medicine shall receive it, and that degree should entitle one to practice medicine where he pleases.

We have medical colleges of which we are proud, and the members of the faculties would be a credit to any school. These men take a a class of students under their care for instruction for a period of four years; they become personally acquainted with most of them, know their habits, listen to daily recitations from them, have them examine cases, give diagnoses, treatment, etc.; and after this training a faculty of honorable men say this class is competent to practice medicine, and accordingly the members of the class receive their hard-earned diplomas.

Now, there is a board of medical examiners before whom this class must go before it is recognized by law. The members of this board never saw this class before, and know nothing of them. They give perhaps ten questions on the various departments of medicine, and from the answers given to these questions this board is able, in a few hours, to pass judgment that has taken the college faculty four years to decide. Because a man can answer seven out of ten questions given him, is that evidence that he is competent to practice medicine? On the other hand, if a man can only answer six of the ten questions studied up by some old practitioner, is that sufficient reason for debarring him from the profession he has chosen? Why not shut out our colleges that fail to come up to the standard? As a rule, most students have limited knowledge of the standing of medical schools. Because the law allows them to run he goes, pays his money, receives his degree, only to find his school is a fraud, and he has spent hard-earned money getting his education. I realize that I will have few supporters on this subject, but I will stand alone if necessary. I believe the degree of doctor of medicine should be a certificate of one's knowledge of medicine. In many instances the state board examination is a farce. I am as ready to accept the judgment of a medical faculty of perhaps twenty men as I am of three medical men comprising a state board.

ALLEN F. MILLER, M. D.,
Wolsey, S. Dak.

THE ART OF MIDWIFERY—A BILL.

OMAHA, NEB., February 25, 1897.

Editor Western Medical Review: In the last issue of your journal you gave space to the bill now pending in the senate to regulate the practice of medicine in this state. While every fair-minded practitioner is of the opinion that the standard of the physician in general cannot be too high, and the means to eradicate the foul and obnoxious element from the profession cannot be too vigorous and radical, yet this bill, which was introduced by Dr. Grothan, to the astonishment and surprise of a great many, finds opposition in some quarters, and all efforts are used to defeat this measure, which would only save us from the invasion of many ignorant men and charlatans. While I am aware of the fact that petty jealousies and "cliques" are not very uncommon among our brother physicians, yet it appears hardly possible to believe that some would carry the divergence to their own disadvantage, just because others are of the opinion that certain measures ought to be carried out.

I heartily sympathize with Dr. Grothan's bill, and have proven it by introducing a bill in the legislature to regulate the practice of midwifery. We all know what we have to put up with with the "quacks." We all know how poisonous to the mind and body of the ignorant people are their obnoxious ways of doing business, yet a great many are not aware of the great injury and harm that is done to the great mass of poor women who are at the mercy of the ignorant midwife.

Every physician has his tale of woe to tell about how many retained placentas he had to remove a week or ten days after delivery; how many cases of puerperal fevers and a great many mischiefs of all descriptions he has to remedy in cases that were attended by ignorant midwives. Having more opportunity than any other physician to witness and correct all mischiefs and errors of ignorant women who claim to be midwives, I was induced to prepare a bill, which, as you will see, has a tendency to correct the evil as much as possible, and see if the community cannot be saved from that horrible plague, the midwife as she is now.

I have organized a school of midwifery, according to the plans laid down by the State Board of

Digitized by Google

Health of Illinois, and according to the laws which govern the midwifery schools in Germany, in which I define strictly where the duties of a midwife cease and the duty of a physician commences, and yet I find that some of our beloved brother physicians are opposing this bill just to be contrary. Some of them are even going so far as to suspect selfish motives and schemes in the bill.

Dear doctor, here is the bill as amended in the house committee, and I hope you will give your valuable space to it and let everybody see and judge for himself as to the merits of same.

Respectfully yours, DR. E. HOLOVTCHINER.

The title of the bill referred to by Dr. Holovtchiner is "A bill for an act to regulate the practice of the art of midwifery in the state of Nebraska." Section 1 says that any person who is a graduate in the art of midwifery, and desires to practice the same, must present his or her diploma for verification, and if it is found genuine and from a reputable school the holder, after payment of the fee, shall be entitled to an examination by the State Board of Health, or such other board as may be designated, and if he or she passes the necessary examination the certificate shall be issued to the applicant, entitling him or her to practice midwifery in this state.

Sections 2 and 3 refer to verification of diploma and minor technicalities.

Section 4 is in reference to the filing and recording of the certificate in the office of the clerk of the county, which is about the same as that which applies to the recording of medical certificates.

Sections 5 and 6 are in reference to moving from one county to another, requiring the recording of the certificate in each county, and the county clerk must keep a book especially for recording these certificates.

Section 7. The fee for examination shall be $5, and shall be paid into the treasury of the board. If an applicant fails to pass, the fee shall be held to his or her credit for a second examination, within a year.

Section 8. Examinations must be made verbally, and shall be made in the following branches: 1. Anatomy of the pelvis and of the generative organs of women. 2. Physiology of menstruation and conception. 3. The signs of pregnancy. 4. Mechanism of labor. 5. Puerperal hygiene and antiseptics. 6. Management of normal labor. 7. Special care of mother and infant in puerperium only.

Section 9. An applicant who desires the examination conducted in any other than the English language may, in the discretion, of the board, furnish an interpreter, at his or her own expense and subject to the approval of the board.

Section 10. Eighty per cent. of correct answers shall be required to pass.

Section 11. The State Board of Health, or such other board as may be designated by law for the purpose, may refuse to issue the certificate to individuals guilty of unprofessional or dishonorable conduct, and it may revoke such certificate for like causes.

Section 12. Definition of Practicing Midwife.—Every person shall be regarded as practicing midwifery, within the meaning of this act, who shall deliver a pregnant woman, at the expiration of her full term, in the vertex presentation, with its four positions, as follows, viz., 1, left occipito anterior; 2, right occipito anterior; 3, right occipito posterior; 4, left occipito posterior; and no person except a regularly qualified and practicing physician shall deliver a pregnant woman in any other position than named in this section, under the penalties provided for a violation of this act.

Section 13. It shall be the duty of every practicing midwife to immediately call a regularly qualified and practicing physician to his or her assistance upon discovery of any abnormal presentation, such as breech, face, and transverse positions, under the penalties provided in section 19 of this act.

Section 14. No midwife shall treat, operate, or prescribe for any physical ailment of another or a woman in puerperium, or infant, nor shall such midwife administer at any time, to any one, any drug, nostrum, ointment, or appliance of any kind intended for the treatment of disease or injury, except such remedies as carbolic acid, or any other antiseptic for use in the art of midwifery for disinfecting purposes.

Section 15. It shall be the duty of every practicing midwife, in every case of any disturbance in or after a natural delivery, such as post-partum hemorrhages, placenta previa, or puerperal fever, to call at once, on discovery of such condition, a regularly qualified and practicing physician.

Section 16. Nothing in this act shall operate to require further examination of any midwife who is now qualified for the practice of the art of midwifery in this state, by reason of holding a diploma from a reputable school of midwifery, or institution in good standing. All holders of such diplomas must present them, together with an affidavit that he or she is the lawful possessor of the same, to the State Board of Health, or such other board as may be designated by law for the purpose, within six months after the passage of this act, to obtain a certificate from said board to entitle them to practice the art of midwifery in this state; Provided, That said board shall receive a fee of two ($2) dollars for such certificate.

Section 17. Penalty.—Any person not possessing the qualifications for the practice of the art of midwifery required by the provisions of this act, or any person who has not complied with the provisions of this act, who shall engage in the practice of the art of midwifery in this state, shall be deemed guilty of misdemeanor, and on conviction thereof shall be fined in any sum not less than fifty ($50) dollars, nor more than one hundred

Digitized by Google

($100) dollars, and the cost of prosecution, for each offense, and shall stand committed until such fine and costs are paid.

Section 18. Any person filing, or attempting to file, as his or her own, the diplomas or certificates of another, or a forged affidavit of identification, shall be deemed guilty of a felony, and upon conviction thereof shall be subject to such fine and imprisonment as are made and provided by the statutes of this state for the crime of forgery.

Society Proceedings.

THE AUSTIN FLINT MEDICAL SOCIETY.—The annual meeting of this society will be held at the K. P. Hall, Hampton, Ia., April 6, commencing at 10 A. M. Among the papers to be read are: "Trichinosis, by Dr. N. H. Goodenough, of Goodell; "Iritis," by Dr. W. L. Grant, of Ft. Dodge; "X Rays, with Photographs by Author," Dr. George Boody, Independence; "Surgical Treatment of Tendons," Dr. N. E. Mighell, Marshalltown; "Extra-Uterine Gestation," Dr. J. B. Tedrow, Williams; "Abdominal Tumors; Differential Diagnosis," Dr. W. B. La Force, Ottumwa. Dr. C. G. Stockman will deliver the annual address. A banquet will be held in the evening. Ladies are invited to this meeting and provision is made for their entertainment. Dr. W. A. Rohlf, Hampton, is secretary, and Dr. Stockman, of Mason City, is president.

ELKHORN VALLEY MEDICAL SOCIETY.

The first regular quarterly meeting of the Elkhorn Valley Medical Society will be held at Norfolk, Tuesday, April 6, 1897. This meeting will be devoted to subjects pertaining to surgery. It is the policy of the officers to expect members to volunteer papers, for this as well as for future meetings. However, in order to insure a full program for the first meeting, arrangements are being made for several papers from well qualified sources, touching the general principles of modern surgery. A complete program will be issued March 15. The titles of all papers must reach the secretary before that time in order to appear on the printed program. The programs for other meetings of the year will be issued on the 15th of the month preceding the meetings. Papers are not to consume over twenty minutes in reading.

Among the papers thus far sent in are: "Abscesses of the Front of the Neck," by Dr. R. J. Chrystal, Osmond; "Chloroform in Surgery," by Dr. B. F. Gay, Pierce; "On the Diagnosis and Treatment of Appendicitis," by Dr. A. E. Schofield, Tilden.

Qualification of Members, Etc.—The members of this society shall consist of regular physicians in good standing, graduates of regular, recognized colleges, and residents of the state of Nebraska. (Article II., Constitution.)

All applications for membership shall be accompanied by the membership fee of $1, returnable if the applicant is rejected.

All members shall, after the first year, pay as annual dues $1. (Article III, By-Laws.)

DR. F. A. LONG, Secretary,
Madison, Neb.

NEBRASKA STATE MEDICAL SOCIETY—OFFICIAL NOTICE.

To the Members of the Nebraska State Medical Society: It is the earnest desire of the officers of the Nebraska State Medical Society that the profession be fully represented at the coming meeting of the society at Lincoln, convening May 18. The present indications are that there will be a large number of physicians attend who have not heretofore been present at these meetings, and the society will feel the impulse and vigor which such new blood will impart. Those who attend may confidently expect to be amply rewarded.

Those intending to read papers are requested to notify the secretary of the title of their papers not later than April 25. They are also requested to state, when notifying the secretary, under which section they desire their papers placed. It should be remembered that the society will be in two divisions—medical and surgical—so there will be ample time for the reading and discussion of all papers. All who contribute articles may confidently expect to be given an opportunity to read their papers, as the program will be carried out to the letter.

The active assistance of the profession is asked to help make the coming meeting a success in every way.

F. D. HALDEMAN, Ord, President.
GEO. H. SIMMONS, Lincoln, Secretary.

MEDICAL SOCIETY OF THE MISSOURI VALLEY.

The Medical Society of the Missouri Valley will meet in Lincoln next Thursday, March 18. The following is the list of papers to be read:

"Report of a Few Interesting Cases," Dr. George Nusum, Honey Creek, Ia.; "Report of a Case," Dr. W. L. Dayton, Lincoln, Neb.; "A Case of Spasmodic Tic," Dr. John Riley, Exira, Ia.; "Trachelorraphy, with Exhibition of a New Instrument for Its Performance," Dr. W. O. Henry, Omaha, Neb.; "The Etiology and Prevention of Puerperal Fever," Dr. W. J. Findley, Atlantic, Ia.; "Treatment of Abortion," Dr. V. L. Treynor, Council Bluffs, Ia.; "Post-Operative Mania," Dr. A. F. Jonas, Omaha, Neb.; "Prolapse of the Cord," Dr. A. D. Wilkinson, Lincoln, Neb.; "Torticollis; Report of Case," James W. Cokenower, Des Moines, Ia.; "Some Thoughts on the Psychical Aspect of Crime and Wrong-Doing," Dr. F. S. Thomas, Council Bluffs, Ia.; "Cerebral Abscess: Operation, Recov-

Digitized by Google

ery," Dr. J. E. Summers, Jr., Omaha, Neb.; "Metastatic Malignant Disease of the Cord," Dr. A. R. Mitchell, Lincoln, Neb.; "Therapeutic Aids in Surgical Diseases," Dr. C. C. Allison, Omaha, Neb.; "Is Phlebotomy a Lost Art?" Dr. W. H. Christie, Omaha, Neb.; "Aseptic Midwifery," Dr. G. H. Simmons, Lincoln, Neb.; "Adeno-Sarcoma of the Nasal Septum," Dr. F. S. Owen, Omaha, Neb.; "A Plea for Greater Accuracy in Diagnosis," Dr. M. H. Everett, Lincoln, Neb.; "The Diagnosis of Malignant Diseases of the Stomach," Dr. W. F. Milroy, Omaha, Neb.; "Unusual Sequela of Typhoid Fever," Dr. H. J. Winnett, Lincoln, Neb.; "Retroversions of the Uterus," Dr. Ewing Brown, Omaha, Neb.; "Anesthetics in Obstetrics," Dr. E. J. Smith, Harlan, Ia. A banquet will be served in the evening, Dr. M. H. Garten, toastmaster.

Following are some of the toasts to be responded to: "What I Don't Know About Medicine," Chancellor MacLean; "Similia Similibus a la Mexicana," H. B. Lowry, M. D.; "The Western Doctor," V. L. Treynor, M. D.; "Antisepsis Twenty-five Years Ago," W. H. Christie, M. D.; "Right or Wrong," A. L. Wright, M. D.; "Medical Legislation vs. Politics," B. F. Crummer, M. D.; "Medical Experts (?)," H. H. Wilson.

OMAHA MEDICAL SOCIETY.

The Omaha Medical Society convened at Omaha February 23, 1897; A. F. Jonas, M. D., president, H. B. Wilson, M. D., secretary.

Dr. D. C. Bryant read a paper, reporting two cases. (See page 65.)

Discussion opened by Dr. S. F. Owen. The time of occurrence of ophthalmia is generally a little later than sixteen days, but there are reports of cases occurring earlier than that, but probably none before twelve days. It has never been my misfortune to have to treat a case of sympathetic ophthalmia. It is sometimes a very difficult problem, in each individual case, to tell exactly the course we should take in injuries of this nature, but I believe, in every case involving injuries of the cornea, that the physician in charge should take the most heroic measures, at least in the treatment, and should not delay it, especially in those cases where there are evidences of loss of sight. As to the case of sarcoma, it is a very interesting one to me, because I do not know that I ever remember a case where there was metastasis of the second eye, but do remember a case where the second sarcoma occurred in the antrum seven or eight months after removal of the eye. The child died, of course. Had a section made, so that there was no doubt about it being sarcoma.

Dr. Harold Gifford: In speaking of tumors in the eye, I remember one case where the second eye was involved. It was that of a child, a glioma, not the ordinary melano sarcoma, affecting the first eye, and, after removal of this, passed back and affected the nerve in the second eye. With regard to the sympathetic ophthalmia, I know of one case where it appeared as early as the ninth day, but this is extremely rare. Never saw one occur as early, even, as the sixteenth day. In regard to what can be done to prevent this, one thing is the testing of the vision of the good eye, as the first symptom is diminution of the vision, which is only determined by a daily testing of the vision of the good eye. Prognosis in these cases is very dubious. Had two cases in the hospital and treatment was begun at once by giving good doses of salicylate of sodium, which restored normal vision in first case, and good vision to the second case.

Dr. J. E. Summers, Jr., asked, as a surgical question, whether or not it would be a good procedure to clear out the orbit completely in these cases of sarcoma. Would like to know what to do, when one gets these cases, to treat them to the best advantage, or should we be expected to put them into the hands of a "specialist."

Dr. D. C. Bryant, in closing the discussion, said, in answer to Dr. Summers, that we must always leave the patient in as presentable an appearance as possible. If you find a growth in the eye-ball itself, with no perforation, remove all the eye and optic nerve as far back as possible. If the eye is perforated, remove it, together with the periosteum.

Dr. J. S. Foote spoke upon "Pathology Reduced." The doctor's talk was very interesting and was well received, but an abstract would not do the subject justice. In the near future Dr. Foote expects to elaborate and write out the schema he advocated.

Dr. W. H. Christie read a paper, entitled, "Some Abuses of the Curette in Gynecology." (See page 61.)

In opening the discussion, Dr. B. B. Davis advised curetting when there is engorgement of the ligaments of the uterus, if the source of the trouble can be removed by so doing. He believed that the rise in temperature is not due to germs, but to ptomains, and cited a case in support of his opinion.

Dr. W. O. Henry said he was a great friend of the curette; however, thought it often unnecessarily used. Has used it for a number of years, and, so far as he can remember, has never had any bad results from its use. He differed from the doctor in two or three points. The uterus should not be packed. After thoroughly curetting the uterus, use pure carbolic acid if the temperature reaches 104 or 105, but not packing the uterus at all, and in ten or twelve hours the temperature drops to normal. If there is no pus or abscess in pelvis or outside of uterus, he would use the sharp curette. In simple endometritis the curette is, usually, not indicated.

Dr. J. P. Lord thinks the after-treatment is not what it should be. Experience in this counts a good deal. Does not think that aseptic metritis

Digitized by Google

will be cured by curetting and vaginal douches. Thinks the uterus should be well packed and the os kept well dilated, the packing being changed at proper intervals. Thinks many of the failures are due to improper handling.

Dr. Ewing Brown believes that in using the word "sharp" we do not mean it in the sense we do in speaking of a sharp knife, but merely one with a well-defined edge.

Dr. J. E. Summers, Jr., does not think there is any operation which is more often abused than the use of the curette; being a simple operation, it is often unnecessarily resorted to. Thinks constitutional treatment will often be sufficient.

Dr. H. M. McClanahan, in speaking upon internal treatment, favored keeping the bowels well opened by douches, abstinence of marriage relations, taking physiological rest, placing the patient in the knee-chest position, occasionally giving tonics, and, in many instances, thought recovery would follow without aid of a surgeon.

Board of Health Proceedings.

NEBRASKA STATE BOARD OF HEALTH.

MEMBERS—Dr. C. F. Stewart, Auburn, President; Dr. B. F. Crummer Omaha, Vice President; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F Bailey, Lincoln, Treasurer.

AT the meeting of the board held March 4 the following were granted certificates:

Adam Herney, Deshler,
Ensworth Medical College, 1895.
Hjalmar R. Miller, Omaha,
Creighton Medical College, 1895.
F. A. Comfort, Omaha,
University of Michigan, 1865.
George W. Strough, Pickerell,
Omaha Medical College, 1896.
William S. Yager, Omaha,
Bennett Medical College, Chicago, 1894.
Brainard Dearborn, Wakefield,
Bowdoin Medical College, 1867.
Thomas C. Little, Bloomfield,
Creighton Medical College, 1896.
Harry Melierian, Brunswick,
Rush Medical College, 1896.
Samuel C. Beach, McCook,
Rush Medical College, 1892.
James M. Talcott, Crofton,
University of Iowa, 1896.
John G. Smith, Stromsburg,
Ensworth Medical College, 1891.
Charles A. Hull, Lincoln,
University of Denver, 1893.

The following were postponed till next meeting:

Bert Menser, Archer,
University of Tennessee, 1894.
Bartholdo Tiesing,
University of Jena, Germany.

The following resolution was adopted March 4, 1897, at a regular meeting held by the secretaries of the State Board of Health, and the secretary instructed to send copy of same to the dean of the school referred to:

Whereas, The Cotner University medical department, otherwise known as the Lincoln Medical College, located at Lincoln, Neb., has heretofore not fully complied with the requirements adopted by the Nebraska State Board of Health; and

Whereas, Said requirements contemplate that a reasonable amount of clinical instruction be given, and that the students, before graduation, receive hospital advantages, as required by law relating to the standing of medical colleges: Therefore, be it

Resolved, That the said Lincoln Medical College is hereby respectfully requested to furnish the board of secretaries, on or before April 1, 1897, definite information, in writing, of the character of the examination required by students for entrance; the amount and character of laboratory work, in histology, pathology, and chemistry, and the amount of dissection carried on and the clinical advantages enjoyed by the students.

Books and Pamphlets Received.

"Symptoms of Speech Disturbances as Aids in Cerebral Localization." By J. T. Eskridge, M. D., Denver, Colo.

"Gynecology Up to Date." By H. E. Wetherill, M. D. Reprinted from the Colorado Medical Journal, February, 1897.

Sixth Annual Report of the Nebraska Institution for Feeble-Minded Youth, at Beatrice, by the Superintendent, Dr. J. T. Armstrong.

"Herniotomy, with Report of a Case." By W. W. Grant, M. D., Denver. A paper read before the Colorado State Medical Society, June, 1896.

"The Cure of Incurables," a paper read before the Michigan State Medical Society by J. H. Kellogg, M. D. Modern Medicine Publishing Co., Battle Creek, Mich.

"Diseases of the Rectum as a Cause of Autoinfection, with Report of Cases." By J. R. Pennington, M. D. Reprinted from the Journal of the American Medical Association.

Annual Report of St. Joseph's Hospital—Creighton Memorial—of Omaha.

This is a beautifully illustrated report of the work done in this hospital for 1896. It contains the history of the hospital, and the report is in every way a credit to the hospital management.

Wilber, Neb., January 19, 1897.—I gladly enclose post-office order to pay for subscription. I like the REVIEW and hope to see it prosper. L. E. Goodelle.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL II. No. 6. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. JUNE 15, 1897.

Address.

MEDICAL EXPERIENCE.*

BY F. D. HALDEMAN, M. D.,

ORD, NEB.

MEMBERS OF THE NEBRASKA STATE MEDICAL SOCIETY: The by-laws of our society make it the duty of your president to deliver a public address, and in the performance of this duty I ask your consideration of the subject of "Medical Experience," with which you are all more or less familiar, but which now, and evermore, must be the subject illustrated in these annual assemblies.

There are but few words in our language of more indefinite import than the word "experience." This holds with peculiar emphasis as regards the daily application of the term to medicine. In no branch of human knowledge is there a more frequent employment of the word "experience" than in medical science. To experience, a confident appeal is ever made by each party in a controversy concerning the curative efficacy of any particular remedy or plan of treatment to be adopted to remove an attack of sickness.

The public, in their excessive appreciation of the value of experience in our profession, deem no opinions wise, or ways of managing disease safe, but such as have upon them the broad impress and superscription of experience. Not knowing that error finds its safest lodgment in the entrenchments of a false experience,—that truth often has to combat on the open plain, unprotected by authority, and uncheered by the voice of applause, so readily bestowed on experience. The science of medicine owes much to experience, but it is an experience at once discriminative and profound. The collected light of ages beams around her path. To the enlightened cultivators of our art, from the days of Hippocrates to the present age of the world, we are indebted for that fund of facts and rational deductions which go to constitute the science of curing diseases. No one individual, in this age, should assume to himself an original experience, completely independent of the past experience of the medical world. Indeed, the most skillful in our art pretend to nothing more than a judicious combination of the experience of the past with their own observations—an application of that knowledge derived from instruction with that acquired by personal inspection, and a careful analysis of the opinions of their predecessors, so as to build upon it a manly and self-sustained judgment. Human nature, true to itself under all circumstances and in every age, loves the luxury of delusion, and most pertinaciously clings to exhibitions of the wonderful, and often delights to yield itself up, without reserve, to an unlimited faith in the wisdom and superior skill of those who assume the ground of official dictation in matters pertaining to the knowledge and cure of diseases. One form of error rises up, received with favor, eulogized as the messenger of great good to man, endures for a season, till another one rises to supplant its older rival, and, like it, flourish in brief existence, then fades away and is forgotten. Medical experience may be either false or true. The former is due, in a great measure, to that almost universal weakness of the human family, credulity. The credulous believe extravagant accounts of the virtues of medicines, perhaps in themselves powerful, but not possessed of all the virtues ascribed to them. Credulity delights in going in constant search of novelties and things out of the ordinary. When a new remedy is suggested, such as tuberculin or antitoxin, and its virtues lauded to the skies by the newspapers and medical periodicals, the credulous-minded physician does neither hesitate or suspend his judgment, but rushes headlong to a sudden conclusion, and upon some very inaccurately observed, isolated case, proclaims his unlimited confidence in the article. It is in the rank soil of credulity that quackery flourishes and sends forth its luxuriant branches. There is no prominent remedy in our list of agents for the cure of disease but what has been at one time surrounded by a mist of eulogy. How many inert substances have been praised to the skies that are now quietly slumbering in the tomb of forgetfulness! Opium, mercury, and quinine are the most effective weapons of medicine. Each of these have been injured, in their legitimate character as medicinal substances, by the indiscriminate praises lavished upon them. The most enlightened physicians now agree that the correct practice of medicine chiefly consists in being able to discover the true curative indications, and not medicines to answer them. The reveries of Hahnemann's subtle but prolific brain may be properly included under the head of credulity. The author of the system of Homeopathy has challenged human credulity to the utmost. Experience is, with exceeding zeal, appealed to by the homeopathic fraternity as the test and sup-

* Presidential address delivered before the Nebraska State Medical Society, Lincoln, May 18, 1897.

Digitized by Google

porter of their wise, safe, and certain plan of eradicating morbid action from the system. And their experience—it is a distinct and peculiar experience—assures them that chamomile flowers excite 1,480 symptoms, iron produces 228, bark 469, platinum 402, and elder flowers 116! A drop of the tincture of sarsaparilla is a strong dose, and a seven-millionth part of a grain of cucumis colocynthis acts very often with too much potency! Dr. Raue, a metaphysical genius of the land of the indefinite and abstract, has given the following, among other cases, to prove the truth of the homeopathic therapeutics: A feeble, attenuated woman, sixty-two years old, had suffered from repeated attacks of pneumonia and difficulty of breathing; and during an acute attack of fever, pain in the side, frequent cough, etc., Dr. Raue gave her the billionth part of a drop of the expressed juice of aconite, mixed with a drachm of water. Very soon a thrilling sensation spread over her frame, a perspiration came on, the pain, fever, and cough all disappeared; and after a sound night's repose, she awoke in renovated existence, and seizing the doctor by the hand when he visited her, she exclaimed with rapture that she was well! In a patient affected with a frightful dropsy, accompanied by great prostration of strength, coldness of the whole body, and inability to discharge more than a few drops of urine, a single very minute dose of the tincture of black hellebore relieved all the symptoms in a few days. Reason and facts are of no avail in a controversy with such medical mystics. We must deliver them over to the same category of imaginative and rapt enthusiasm as that which possessed the seething brain of Emanuel Swedenborg, who talked familiarly with angels and devils, and had revelations and visions as divine as the second sight in Scotland.

The progress of science and sound medical education is apparent in the changes of opinion now observable in the homeopathic ranks. Many of its members now speak out boldly and acknowledge their disbelief in high potencies acting homeopathically. Others claim the right to prescribe according to the dictates of their own consciences. They are now showing a disposition to drop their title, and we may reasonably expect to see the day when this delusion will be returned to the oblivion from which Hahnemann so injudiciously raised it. In reviewing the progress of medicine, it is very evident that Homeopathy has presented us with little that can be regarded as scientific medicine, though it has increased our confidence in the "vis medicatrix naturæ," or masterly inactivity in some cases. Most of the great medical discoveries that have benefited mankind have been made by the regular old school of medicine. The discovery of the circulation of the blood by Harvey, of vaccination by Jenner, of auscultation and percussion by Laennec, of ether by Morton, of chloroform by Simpson, of cocaine by Carl Köller, of disease germs by Pasteur and Koch, giving us the science of bacteriology and laying the foundation of antiseptic surgery introduced by Lister,—are but a few that time permits me to enumerate; whilst Homeopathy has done little but offer us a doubtful therapeutics and an incorrect materia medica. For nearly all that is truly useful and scientific, Homeopathy is indebted to the works of old school physicians, whose widespread scientific attainments they have presumed to designate as allopathic ideas. They, however, have not hesitated to adopt our remedies, and to administer them in full doses. The term Allopathy is defined as being "a system of medical practice which aims to combat disease by the use of remedies which produce effects different from those produced by the special disease treated,—a term invented by Hahnemann to designate the ordinary practice, as opposed to Homeopathy." I need hardly say that such a system of medicine is not, and has never been, the basis of the teaching of any regular medical school, and that the scientific practice of medicine is not limited to any such idea. A regularly educated physician, like the members of this and similar societies, is not an allopath any more than he is a homeopath, or an antipath; and it is the duty of every member of our body to reject and deny the correctness of such a title when it is mentioned, and not permit it to be applied to him individually without explaining its erroneous application. If, as Dr. Oliver Wendell Holmes has said, "the regular old school physician must have a Greek name of this pattern, call him a pantopath, as his simple doctrine is to employ any and every remedy or agency which experience shows to be useful in the treatment of disease. Any remedy that can make a decent show for itself is sure of a trial at his hands." The old school physician does not hesitate to employ the wet pack of hydropathy or the galvanic current of electropathy, or the little pills popularly supposed to belong to homeopathy. He is not restricted in his treatment of disease by any such dogma as "contraria contrariis curantur," or the reverse. He does not attempt to relieve a fever by creating a chill; but he does diminish unnatural heat by its natural opponent, cold; he relieves thirst by drink; hunger by food; wakefulness by sleep; but he accomplishes this, as has been well said by one of our widely known medical writers (Bartholow), by "recognizing the fact that the therapeutical action of a medicine is the physiological antagonist of diseased action." Rational medicine is progressing, as it has progressed in the past, and as it will continue to progress in the future. There are two main sources opened to us for the attainment of true experience in medicine. The one direct, emanating from our own personal observation; the other flowing from the testimony of others. What is so frequently called experience deserves not that title. The wise only profit by experience, is an adage that receives its most emphatic illustration in medicine.

Digitized by Google

A man ignorant of the fundamental principles of the science, and incapable of reasoning in a correct manner, may grow gray in the practice and remain ignorant of the most important truths. How often the hoary head of inveterate error occupies the chair of authority, which wisdom alone should fill. The most profoundly ignorant of medicine are often those who have paced along the deep, worn path of routine for near half a century. A thorough teaching of the principles of medicine; an extensive, accurate, and profound medical scholarship, are absolutely demanded to qualify men to acquire knowledge from their own observations. In vain are facts presented to the eye of one ignorant of the principles of our science; he is not capable of recognizing their importance, nor of deducing from them those results which will guide him in future cases. There are no two cases of the same disease which are exactly alike. The endless varieties observed in different patients suffering under the same malady arise from difference of constitution, diversity in modes of life, from the distinct nature of the exciting cause, and from the peculiar emotions which may at the time agitate the mind. To prescribe, therefore, the same remedies for the same disease, without a due inquiry into the state of the system, merely because they were successful in another patient, is rank empiricism.

Possessed of an accurate knowledge of the structure and functions of the healthy human body, and having acquired from his experience a just conception of the nature, symptoms, and treatment of the class of disease to which the case under his observation belongs, the physician is well prepared to administer, not for the name of the malady, but for the state of the system. True experience does not always grow with the progress of years. In many instances advancing years but confirm the decisions of prejudice, and add strength to the presumptuousness of ignorance. Neither does the multitude of patients which a physician may be called to attend necessarily enlarge his views, or add to the vigor of his judgment. It is not the number of cases which a physician sees, but the degree of careful analysis which he makes of those which are submitted to his inspection, which constitutes true experience. Neither personal observation alone nor scientific research alone should be trusted, but the utmost use should be made of both, ignoring neither the wisdom of the past nor the discoveries of to-day. To be thorough in one's professional acquisitions, and to prove it in consultation at the bedside; to advance the interests of the profession, both in its scientific and general capacities, and to observe the laws imposed by the most delicate sense of professional propriety and good taste, are things which are in accord with the best traditions. Let us continue to recognize and apply medical knowledge, wherever it may originate. The present stage of progress will doubtless hereafter be cited as an important period in its history. For the past few years bacteriological and clinical studies have tended to develop more and more our knowledge of the existence of specific agents in the causation of diseases. A host of diseases have been proven to be of parasitic origin. Metchnikoff and others have penetrated deeply into the mysteries of cell life, and have actually been eye-witnesses to the combat between the living animal cells and the assailing microbes. Modern scientific medicine has given us a new form of treatment, which promises favorable results in some diseases heretofore considered incurable. The serum treatment of tetanus, though not so successful as could be wished, still deserves an extension of trial. In a number of reported cases this disease has yielded to the tetanus antitoxin of Titzzonii, which at present seems to be the best prophylactic treatment known for the destruction of the tetanus bacillus. The successful treatment of diphtheria by the antitoxin discovered by Behring has been firmly established.

Good results are secured in the use of Richon's serum therapy in syphilis; anti-tubercle serum in tuberculosis of the skin; anti-streptococci serum for septicemia; and the more recent discovery of the anti-plague serum by Dr. Yersin. This is the golden age of inquiry. The movement of the day is toward specialties. That excellence follows large experience in narrow lines is obvious, but is there not reason to fear that a specialist who is not well informed, both by learning and practice, is apt to blunder? This is the great danger of the day, and the necessity of devoting a number of years in active general practice before taking up a specialty should not be overlooked.

In closing, allow me to thank you for your presence at this annual meeting, and to express my feelings of gratitude for the unexpected honor conferred upon me at the last meeting of this society, and to cherish the hope that in fulfilling the duties of this responsible position I may be sustained by your cordial co-operation. We must here engage earnestly in furthering the interests and objects of the medical profession. We have come together from all parts of the state, charged with these great responsibilities. May this, the twenty-ninth annual session of the society, be characterized by harmony and good feeling; with the blessing of Providence, may its proceedings strengthen the attachment of the medical profession, extend the boundaries of our knowledge, and promote the welfare of mankind.

THE pain of incipient hip joint disease is very seldom situated in the joint, but at the inner side of the knee, leg, or ankle.

WE ALWAYS DO.—"Take away woman," shouted the orator, "and what would follow?" "We would," said a man at the back of the audience, promptly.—Tid-Bits.

Digitized by Google

Original Articles.

ETIOLOGY AND TREATMENT OF MEMBRANEOUS CROUP, SO-CALLED.*

By H. M. McCLANAHAN, A. M., M. D.,
OMAHA, NEB.,
PROFESSOR OF DISEASES OF CHILDREN, OMAHA MEDICAL COLLEGE.

The nature and etiology of membraneous croup has engaged the attention of both pathologists and clinicians for the past fifty years. The correct treatment of this disease depends upon a right view of its etiology, and in order to get a clear understanding of the subject, I wish to call your attention to certain facts in the history of this disease. Since 1850 two views have been entertained by the profession as to the nature of this malady; the one that it is local, non-contagious and distinct in its etiology from diphtheria; the other that it is but a manifestation of diphtheria. Virchow, in his work on pathology, in 1847 maintained that a diphtheritic exudation was poured out into the mucous membrane, and that the mucous membrane became a part of the morbid process, while a croupous exudation was implanted upon the mucous membrane and included only the epithelial covering, and that when a diphtheritic membrane was torn away it left a raw, bleeding surface. Clinical experience, however, demonstrated that both varieties of membrane might exist in ordinary pharyngeal diphtheria. Indeed, in the same case portions of the membrane were separated, either by disintegration or exfoliation, with some portions of the mucous membrane intact, others raw and bleeding. Virchow, therefore, in 1854 abandoned this distinction and then maintained that necrosis of the subjacent tissues was the characteristic feature of a diphtheritic exudation. We now know that while this is true in some cases, it is not correct in the majority of cases of diphtheria, and furthermore, there are cases of ulceration of the larynx in what we term croupous inflammation.

Ernest Wagner, in his work on pathology in 1866, states that croupous and diphtheritic membranes are very much alike, and that microscopically he can discover no striking difference, and he states that the time has come to drop the distinctice words "diphtheritic" and "croupous."

Reindfleisch admits that the pathological processes are alike in both croupous and diphtheritic inflammations, but while admitting the anatomical identity, he strongly opposes the fusion of membraneous croup and diphtheria clinically.

Zeigler, in his work in 1862, makes no pathological distinction between croupous and diphtheritic inflammations, and says that when diphtheria is accompanied by croupous inflammation of the larynx it is the same as the affection clinically called membraneous croup. He does not, however, commit himself as to the nature of membraneous croup when it occurs as a primary disease. It will thus be seen that pathologically there is no line of distinction between diphtheria and membraneous croup. While this is true, the majority of writers until within a few years have maintained that the diseases were clinically distinct. Let us now briefly analyze these distinctions. They are as follows:

That croup is a local disease of the sthenic type of inflammation; that there is no lymphatic enlargement; that there is no albuminuria, no general paralysis, and that it is non-contagious. On the contrary, diphtheria is a constitutional disease of the asthenic type; that the cervical glands are inflamed and enlarged; that frequently there is albuminuria, and various forms of paralysis occur as complications or sequela, and that it is highly contagious. No one will deny that these distinctions exist in many cases, but that they form a sufficient basis for assuming that the diseases are distinct etiologically is incorrect. Pharyngeal diphtheria is frequently a local disease, so far as symptoms are concerned, and it is conclusively established that the constitutional symptoms manifested are the result of septic poison from the absorption of ptomains. In membraneous croup the symptoms are frequently local, because of the difference in the structure of the parts upon which the membranes are implanted. Beneath the mucous membrane of the larynx there is a basement membrane, and below the false vocal cords the epithelium is columnar. This histological condition promotes the separation of the false membrane generally without destroying the integrity of the mucous membrane, and also prevents the absorption of septic material. There is, therefore, less liability to general infection. Furthermore, the lymphatics supplying the larynx have their drainage depot in the gland just below the hyoid bone, and the small glands at the side of the trachæ. These are out of reach and out of sight. In cancer of the larynx there is no lymphatic inflammation, and yet no one disputes that it is the same disease as when involving the structures of the pharynx. The pharynx is covered with squamous epithelium below the floor of the nares, and the mucous membrane is full of racemose glands and lymphoid tissues. The lymphatics supplying the pharynx drain into the cervical glands. Absorption is therefore easy and the glands are usually enlarged, not only in diphtheria, but in many inflammations of the throat. These anatomical facts dispose of some of the important distinctions between the two diseases. As to albuminuria, it is probable that this is due to the irritating action of toxins upon the uriniferous tubules, and as we have already shown that the absorption is much greater when the membrane is upon the pharynx than when upon the larynx, it is apparent why this symptom should be much more frequent in diphtheria than in so-called membraneous croup. However, it has been demonstrated that albumin-

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

uria is present in cases of membraneous croup. Multiple paralysis is usually a sequela of diphtheria, and in former times when these observations were made very few cases of membraneous croup lived long enough to develop this symptom. Recently several cases of multiple paralysis have been reported as sequelæ of true croup. In one case under my own care there developed a paraplegia ten days after recovery from a clinically typical case of membraneous croup. That membraneous croup is more feebly contagious than pharyngeal diphtheria is true, for the reasons that in most cases no membrane is coughed up; that there is very little discharge from the nose and throat. We know that the germs reside in the membrane, and that as it is not coughed up, they cannot gain access to the external world and contaminate the surroundings of the patient. Indeed, in the majority of the cases patients die from the stenosis before there is time for the disintegration of the membrane. That diphtheria is in the majority of cases an asthenic disease is true, but that membraneous croup is always sthenic is not true, and the facts I have already cited as to the difference in the location of the membrane explains the reason why more cases of membraneous croup do not present symptoms of fever, rapid prostration, etc. It will thus be seen that the clinical distinctions separating diphtheria and membraneous croup are not tenable. That the tide has been steadily turning toward the identity of the two diseases will become more fully apparent as I cite the opinions of the following authors:

Prof. Morell Mackenzie, after observing diphtheria in the terrible epidemic in England from 1858 to 1862, became convinced of the identity of membraneous croup and diphtheria. Perhaps the most able presentation of the subject was his Jacksonian Prize Essay, published in 1863.

Meigs & Pepper, in their work on Diseases of Children, published in 1877, give a separate chapter on the subject of membraneous croup, but state that they are strongly of the opinion that the majority of cases are probably diphtheria.

Ashby & Wright, in their work on Children, published in 1896, say: "In the great majority of cases, if membrane be present in the larynx, the case is one of diphtheria, but in the present state of our knowledge it is not wise to take up the dogmatic position, except in so far as to view every case of laryngitis, whether we find membrane or not, with suspicion, as all such cases may turn out in the end to be diphtheria."

The American Text-Book, published in 1894, does not treat of membraneous croup as a separate disease, but membraneous laryngitis is treated under the head of diphtheria. Professor Smith, in the edition of 1896, says: "Whether diphtheria or pseudo-diphtheria prevail as an endemic or epidemic, it is well known that a large majority of cases of membraneous croup are local manifestations of one or the other of these two diseases, or of the two combined." But because true croup was a fatal malady before diphtheria was recognized in this country, he thinks all membraneous laryngitis is not diphtheria, but says: "I cannot resist the conviction that its cause prior to 1850 was pseudo-diphtheria; in other words, the presence and action of the streptococcus and staphylococcus."

Professor Rotch, in Pediatrics, published in 1896, says: "Until it is proved not to be so, pseudo-membraneous laryngitis must be clinically looked upon as infectious and due to the Klebs-Loeffler bacillus." He admits, however, that some cases are probably due to the infection of other cocci.

Professor Holt, in his work on Diseases of Children, published in 1897, says: "Pseudo-membraneous inflammation beginning in the larynx is almost invariably true diphtheria; i. e., this is due to the Loeffler bacillus." Again, pseudo-membraneous laryngitis following primary pseudo-membraneous inflammations of the tonsils, pharynx, or nose is in the great majority of cases due to the Loeffler bacillus.

These quotations demonstrate the tendency of modern writers upon the subject of diphtheria.

Finally, bacteriology has completed the last link in the chain of evidence of the identity of diphtheria and membraneous croup in the vast majority of cases. The bacilli-diphtheræ has been found in cases clinically typical of membraneous croup, thus establishing the positive etiological identity of membraneous inflammations of the throat and larynx. When the larynx is invaded in a case of ordinary pharyngeal diphtheria, the symptoms are in nowise different from those occurring in membraneous croup. Within a few months I had the opportunity of having a culture made from a case in which I intubated, where there was never any evidence of any membraneous inflammation of the pharynx, and the presence of the diphtheræ bacilli was clearly demonstrated. Again, I have seen in the same family cases of ordinary pharyngeal diphtheria and other cases of so-called membraneous croup, and while the personal observation of one physician is not sufficient to establish a law, the fact of being able to identify the two diseases even in one case has convinced me of the utter fallacy of recognizing a membraneous laryngitis distinct from diphtheria.

In conclusion, it may safely be affirmed that nearly all cases of membraneous laryngitis are but a form of diphtheria; that the majority of such cases are secondary to pharyngeal diphtheria; that the germ may be in the pharynx and affect the larynx without there being any membrane in the pharynx. This fact I was able to demonstrate this past winter by bacteriological tests. The principal reason, however, for presenting at some length to the members of this society the evidences of the etiological identity of diphtheria and membraneous croup is that our view of

Digitized by Google

its etiology will control the treatment. I believe, from personal observation, that lives are sacrificed by maintaining that there is a membraneous inflammation of the larynx which is not diphtheria. That view of the disease will deprive our patients of modern methods of treatment. Let me say further that the risk is all on one side. To treat a case of membraneous croup as if it were diphtheria gives the benefit of the doubt to the patient and does not add to the risk of life, but to treat a case of membraneous croup as if it were a distinct disease is to deprive our patients of modern methods of treatment of inestimable value. It will be a blessing, therefore, to humanity when the term membraneous croup is dropped from the nomenclature of disease, and instead all diseases of the larynx sufficiently severe to produce marked stenosis be called diphtheritic croup.

Permit me briefly to direct your attention to the subject of the treatment. There is nothing new to be said, but a reiteration of well established facts may be of benefit to us. The first important point in the treatment, and one, unfortunately, which is not always in the control of the physician, is that it should be commenced early in the disease. When parents become educated so that they will look with suspicion upon any case of croup that persists more than twenty-four hours, much will have been gained. I do not believe that there is a disease in the whole nosological list where prompt and careful treatment is so important as in diphtheritic croup. Delay is not only dangerous, but frequently fatal. The patient suffering from this disease should be at once isolated and placed in a large well ventilated room. The nurses and all those in attendance should use every means possible to prevent the spread of the contagion. Some means should be improvised for the generation of steam, so that the air may be constantly moist. Increasing experience convinces me that this is a very important point in the treatment. The patient should be kept in bed. It is unwise and unsafe to permit the child to run about. Every particle of energy and strength should be conserved.

The proper nourishment of the patient should be carefully supervised. This is more important, perhaps, than we fully realize. Food should be administered regularly, systematically, and in quantities to suit the age and condition of the patient. Stimulants are indicated in many cases, and at critical times may be the means of tiding the patients over.

When diphtheritic croup is secondary to severe laryngeal diphtheria, we should pay particular attention to the condition of the heart. In this form of the disease the three great dangers are asphyxia, sepsis, and heart failure. When, therefore, the pulse is rapid or abnormally slow, heart stimulants are indicated. Here strychnia is the sovereign remedy, and the dose should be larger than is generally given.

Antitoxin should be administered in every case at the earliest possible moment. The dose is to be repeated in the course of twenty-four hours if the symptoms of stenosis progress. Where the case is seen late, that is, when stenosis is already well marked, intubation should be performed. The fact is many of these patients do not really choke to death, but they die from exhaustion resulting from the constant muscular effort to pump air into the lungs. The strength thus wasted can be conserved by prompt intubation. Where the symptoms are urgent when the case is first seen, I am satisfied it is better to intubate at the same time we administer the antitoxin. It is the observation of many that intubation is much more difficult twenty-four hours after the use of antitoxin. This is probably due to the fact that the membrane rapidly disintegrates and there is more danger of pushing it down in front of the tube or of having the tube become occluded with loose particles of membrane. It has been my experience that if the case does not become worse for twenty-four hours after the use of antitoxin, that is, if the breathing is no more rapid or labored, intubation will not be required.

Again, in those cases where there is not only membraneous inflammation of the larynx, but where the bronchial tubes and even air vesicles are involved, we may have recourse to the means already indicated, and, in addition, much is to be gained by the administration of nascent oxygen. In these cases the stenosis may be relieved by intubation, but there is so great an occlusion of the smaller bronchial tubes that the child may die from carbonic acid poison, just as we see cases terminate fatally in catarrhal pneumonia. In two cases under my care, after the administration of antitoxin and after intubation, I have seen the most brilliant results from the administration of oxygen. Where the physician is not able to procure antitoxin, or where he is not in position to intubate, then the most promising treatment is by calomel fumigation. Dillon Brown, of New York, has reported a large number of cases, mostly in private practice, in which he has resorted to this treatment, with an average mortality of only 50 per cent.

In conclusion, when we think that ten years ago the mortality from this disease was 90 per cent., and that to-day, under modern methods of treatment, it is from 25 to 40 per cent., we have cause for profound congratulation and are encouraged to press forward with the hope of yet lessening the mortality.

THE professor of materia medica was seated at the table when the first candidate for the final ordeal entered. She was a trim maiden, just past thirty. "Well, Miss B.," said the professor, "I suppose you know my first requirement? Have you read Hare?" "No, indeed," was the curt reply; "and if I had I'd bleach it."

Digitized by Google

MENTAL FIXATION INFLUENCED BY THE RECTI MUSCLES OF THE EYES.*

BY M. H. GARTEN, B. S., M. D.,
LINCOLN, NEB.

This being a school town, having more than three thousand students in attendance at the various institutions, who come from all the walks of life in this western nervous region, we get the young man and woman who, knowing just how many drops of human sweat fill the measure of a dollar, and just how many dollars there are between them and the coveted education. These lose no time in frivolity, but devote themselves to unceasing labor, and it is a labor that requires the full capacity of normal eye-power at near work. This means that the internal and inferior recti muscles must hold the eyes at convergence so long as the near print of work is followed, thereby keeping them under fixed strain for hours at a time during the entire school year. The result in many cases is that they seek the aid of an oculist, saying, "My eyes give me a great deal of trouble, and it is hard work to fill my hours."

These people, under examination, often describe double images, in many instances amounting to a decided squint. Other cases do not observe double images with the rod or colored glass test, but are unable to see a single image through a prism of a few degrees in strength, demonstrating the weakened condition of the ocular muscles. Yet their ability to hold the eyes in line under ordinary conditions is at the expense of great effort.

Natural philosophy teaches us that "nature abhors a vacuum." Just as much, do I think, the visual centers abhor double images. And under the reign of weakened recti muscles these brain centers stand sentry, keeping the eyes in line, until the weakened muscle gives up the fight and permits its antagonist to drag it away. Then the brain begins the lesson of teaching itself to ignore the image seen with the eye rendered truant.

Experience in treating those suffering with muscular insufficiency of the recti muscles of the eyes has led to one observation which I have not seen published. Neither have I heard it discussed save in the cases where I have spoken of it to my brother practitioners. While this subject is new to me, it may be an old one to many of the members of this society. The subject, "Mental Fixation Influenced by the Recti Muscles of the Eyes," has been chosen because it is a digest of this entire paper. A study of fifty-seven cases of muscular insufficiency has convinced me that the ability of the patient to fix the mind upon a subject is below normal; that a greater amount of time must be employed to accomplish a given amount of brain work; that a page may be honestly read, every word and sentence seen; that the mind has not fixed any of the subject-matter; that it has wandered from the subject and is following some other thought; that mental work becomes drudgery, and studies which were a former source of pleasure, and were fixed upon the mind with ease, are only prepared for imperfect recitation after much labor and worry, and that a restoration of the weakened muscle to its normal strength restores the former mental grasp.

So positive have I become that this condition exists that I unhesitatingly say to a patient, after detecting the weakened muscle, "I will now tell you something that you have kept a secret. You cannot take up a book and read a page and keep the sense of it. You find your mind following some other train of thought after reading a few lines." Very rarely is a negative answer given. Out of fifty-seven cases I have had but two, one of whom corrected his answer after a week's treatment, saying, "I never was in position to appreciate the question until now. My school work is much easier done." Upon being informed that the mental defect is the result of muscular insufficiency, the usual reply is: "I am glad to hear that. I was afraid my mind was failing. To hear you make that statement is a great relief to me. I have worried greatly over my mental defect, and feared it might be the beginning of some serious brain disease."

The statement that restoration of the weakened muscles to their normal strength restores the former mental grasp, or fixation of subject-matter by the mind, is clearly set out in a number of letters from former patients, whom I have asked to express in their own language the results of treatment for this difficulty. I will only encroach upon your time by quoting three of them, they being a fair sample of the rest:

The first one is from a teacher, a lady, aged 28. She says: "In June, 1896, my eyes first began to give me serious trouble. They pained me quite a little, but I suffered most inconvenience from the fact that in reading or in school work, which I was obliged to do, it seemed necessary for me to make a tremendous effort in order to grasp the thought, and after a half hour's work I would feel completely fatigued and unable to do more. This trouble continued during the summer. I did very little brain work, simply because it tired me to make the effort necessary to keep the line of thought. I even gave up light reading; it was wearisome to read anything, and unless I made great exertion I could not remember the beginning of an article when I reached its close. The rest of the summer benefited my eyes and when school began in September I found I could work with better results and less discomfort than in June, but a constant use of my eyes soon brought a return of the old difficulty. Since my eyes have been treated for the strengthening of the muscles I find I can work with greater ease, and do not experience the fatigue above referred to.

"A few weeks ago, when I was exceedingly busy and had neglected the treatment for the muscles

* Read by title before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

for about three weeks, I found myself suffering from the brain fatigue I had experienced in the summer. In trying to prepare an astronomy lesson I found myself reading a page over and over and yet not being able to remember when I reached the bottom what I had read at the top. Since resuming treatment this difficulty has been overcome."

The second is from a young man, age 25, a student of the University of Nebraska.

"LINCOLN, NEB., April 28, 1897.

"For the last two years I have had difficulty in keeping my mind upon my work, and still greater difficulty in retaining anything I had read. I could not use my eyes for any length of time without tiring. I often visited the city library and read interesting articles from leading magazines, and upon returning home would with great difficulty recall the subject of the article I had just read.

"Three weeks after I first took treatment I noticed a marked change in this condition of affairs. Several times people have entered rooms where I was working without my knowledge of their presence. I am now able to read twice the length of time before tiring, and have no difficulty in retaining what I read. Several times I have remembered with ease, when there was occasion for it, the numbers of pages to which I had referred two days previous."

The last I quote is from a young man of 24, a member of the senior class of the university.

"LINCOLN, NEB., April 16, 1897.

"I am pleased to let you know what your treatment has done for me. It has greatly increased my power of concentration; I can now study or read and give my entire attention to it. As a consequence my memory has been greatly improved."

My impression is the constant effort required by the patient to hold the eyes in proper position causes brain fatigue. And if this is the case it easily accounts for imperfect mental fixation and the inclination of the mind to wander from the subject desired to be fixed and follow some day-dream of its own creation. Experience teaches that these patients become day-dreamers as soon as any dry or complex subject-matter is taken under consideration.

The treatment spoken of is that usually resorted to for muscular insufficiency, either prism practice, advancement or graduated tenotomy. In most cases the preference was given to the former method. The gratifying results obtained by this procedure, in procuring both mental and physical comfort for the patient, has suggested this paper, with the hope that some thinker along the line of cause and effect may more fully explain to me the reason why weakened ocular muscles make drudgery of systematic thinking.

Since this article was presented to the society a very strange and interesting manifestation has presented itself in the person of the private secretary to a recent candidate for the presidency of the United States. His duties give him the supervision of letters, which often reach 2,500 per day. Under this strain his eyes first gave him trouble about two months since. He was unable to fix them upon his work for any length of time until a pain would be felt streaking from the left brow backward towards the occipital region. While under treatment he remarked that his head (which is very bald) pained him most when it was exposed to the light. This I paid little attention to until a few days since, while waiting his turn in my reception room, I noticed he wore a black skull cap. This he still wears, and to-day remarked that he did not know which he would rather give up, the cap or the glasses, saying: "With the break of day I go under my pillow for this cap, and wear it all day and evening. If I do not the light falling upon my head produces intense pain. Day, gas, or electric light produce the same results, and the pain is cut short when the light is shut out."

To-day I presented this case to Dr. H. B. Lowry, of this city, hoping he might throw some light upon this case of light producing obscurity. I mention it thus in detail because it is one of the few cases I have encountered since 1871 that I did not either cure or kill. Consequently it must be out of the ordinary line, and I freely confess my total ignorance of the conditions required wherein light will produce excruciating pain on a bald head.

TWO CASES OF ACROMEGALY.*

BY H. GIFFORD, M. D.,

OMAHA, NEB.,

PROFESSOR OF CLINICAL OPHTHALMOLOGY AND OTOLOGY, OMAHA MEDICAL COLLEGE.

Acromegaly is so rare an affection that I have thought the members of the society might be interested in a report of the first cases observed in this section of the country.

I will briefly remind you that in typical cases the disease manifests itself in a slow enlargement of the hands and feet, of the lower jaw, frontal ridges, tongue, lips, nose, ears, and pituitary body. It runs an extremely chronic course and may become stationary, but if it progresses and the patient does not die of some intercurrent affection, a cachexia sets in and death occurs from exhaustion.

My first case was that of Mrs. R., aged 32, a Russian Jewess, who came to me December 16, 1893, on account of poor vision. I found her to have in the left eye an optic neuritis, with vision reduced to counting fingers at one to two feet. The right eye had a rather pale nerve, but the vision was normal. The patient was an undersized woman, about four feet seven inches in height, with the hands, head, and feet of a giant-

* Read before the Nebraska State Medical Society, Lincoln, May 20, 1897.

Digitized by Google

ess, a large part of the increase in size being due to hypertrophy of the bones, both in length and breadth, but much of it being also due to an increased thickness of the skin and of the subcutaneous tissue, particularly at the outer side of the palmar surfaces, where the soft tissues stood out in an immense roll, both in the hands and feet. The lower jaw, the lower lip, and the nose were all disproportionately large for the large head; the skin of the face was thick and bulged up below the eyes in a firm roll. The tongue and ears were not much hypertrophied, nor were the supra-

CASE I.—Pronounced acromegaly.

orbital ridges as marked as in some cases. The thyroid gland could not be felt. The patient stated that she first noticed an increase in the size of her hands and feet seven years ago; five years ago she ceased menstruating, since when the hypertrophy of the extremities has steadily progressed and the appearance of her face has changed entirely. During the last eleven or twelve years she has had to increase the size of her shoe from No. 3 to No. 8. She has much headache and feels very weak and nervous. The family history is negative and she has several healthy children. Owing to the disproportionate increase in the soft tissues of the hands and feet, which most text-books distinctly state does not occur in acromegaly, and to the thickness of the skin of the face, I was at first inclined to consider the case one of myxedema, and exhibited it as such at a meeting of the Omaha Medical Society; however, one of the members (Dr. Bridges) suggested that it was more probably acromegaly, and on looking the subject up more thoroughly I concurred entirely in this opinion.

At first I gave the woman mercury and iodide of potash for her optic neuritis, but upon this, while the neuritis of the left eye improved, the vision of the right eye became reduced to 6-200, without any corresponding change in the ophthalmoscopic appearances. On continuing the iodide alone in still larger doses the vision of the right eye improved rapidly, that of the left slowly, until by March 13, 1894, the vision of the right eye was 20-30, that of the left 15-200. Meanwhile I had had a glycerin extract of sheep's thyroids prepared, which I determined to use in spite of my decision that the case was acromegaly rather than myxedema, but upon my attempting to use this, subcutaneously, the patient disappeared and I did not see her again for a year. She then made a single visit to my office and I found her appearance practically the same; both optic nerves showed slight atrophy; the vision was 20-30, each eye. On the whole, she felt better than a year before. She has since left the city.

My second case was that of Peter Claus, aged 23; born in central Russia, but of unmixed German stock. He came to me February 5, 1895, on account of spells of dizziness and headache, which for some reason he attributed to his eyes. I found his eyes to be normal in every respect, but after seeing him a few times I decided that his case was one of unmistakable, though slightly marked, acromegaly. His height was about five feet ten inches. The whole head was unusually large, but the lower jaw was disproportionately long and broad at the chin; above the eyebrows and between them there was a very prominent ridge, apparently entirely bony. Questioning brought out the fact that he began having the spells of dizziness three years before, and that he noticed the growth of the ridge over the eyes about the same time. For the last two years has noticed an undue growth of the lower jaw. Has not been much troubled with headache till within a few weeks. The fingers, especially of the right hand, are decidedly larger, both in length and thickness, than normal, but, as in the preceding case, they are not larger at the tips than elsewhere. The soft tissues at the outer side of the palmar surface of the feet seem somewhat hypertrophied and the ears are rather large. Other signs of acromegaly are wanting.

This man was given Armour's thyroid tablets and disappeared after taking them a few days. This spring, however, I hunted him up and learned that he had continued the tablets for about two weeks, since when he has had practically no head-

Digitized by Google

ache and his dizzy spells have been much less frequent. He considers himself practically well. The appearance of his face and hands is, apparently, unchanged. His eyes, visual acuity, and fields of vision are entirely normal.

This case is interesting on account of its slightly marked character. I have no doubt that many such go unrecognized; the individuals simply being accounted rather unusual-looking.

It may seem strange that I should have given the question of myxedema any consideration whatever in so well marked a case of acromegaly

CASE II.—Moderate acromegaly.

as Case I. In this I was misled by the distinct statements of the books that the soft tissues of the hands and feet are not disproportionately hypertrophied in acromegaly; also by the statement that the fingers tend to be larger at the ends. Mrs. R.'s hands and feet showed a very markedly disproportionate thickening of the palms and soles, and the fingers tapered decidedly at the points. A number of writers have noted an analogy between acromegaly and myxedema, and when this case was presented to the Omaha Medical Society the only member present who had ever seen a case of myxedema stated that he had recently seen several in the English clinics, and that he considered this case also to be of the same nature. My reasons for deciding against myxedema, aside from the evident bony hypertrophy, to which I had not at first given sufficient weight, were that while the skin of the face and extremities was decidedly thickened, it was not particularly harsh, and the skin on the rest of the body was practically normal; nor was there any of the supra-clavicular thickening which is characteristic of myxedema. With regard to the use of the thyroid tissue in the treatment of acromegaly, while all the modern text-books that I have consulted state that no treatment is of any avail, and it is not to be expected that anything will relieve the bony deformity, a number of cases have been reported in which the subjective symptoms, as in Case II, have been much improved by its use. And while, from the almost constant involvement of the pituitary body in the disease, the use of preparations of the latter gland would seem to promise more than the thyroid substance, a case has been reported by Caton (Lancet, February 9, 1895) in which pituitary tablets were given for some time with doubtful results, while when the thyroid tablets were added to these the improvement was marked and rapid. For the present, it is uncertain whether thyroid, pituitary, or thymus substance is most useful. I did not attempt in either of my cases to ascertain the size of the thymus gland, which Erb says is enlarged in acromegaly.

With regard to the eye symptoms, which I have purposely slighted, in order not to weary a non-oculistic audience, the occurrence of optic neuritis in acromegaly is not mentioned in any general text-book that I have seen, but on consulting the monograph of Hertel (Archiv f. Ophthalmologie, XLI., 1) I find that it has been reported in a number of cases. In Case I the visual fields at no time showed any tendency toward the hemianopic type which has so often been noted. This defect of vision is in all probability due in most cases to pressure exerted by the hypertrophied hypophysis; but that this pressure, as almost universally stated, is exerted upon the posterior border of the optic chiasma is certainly incorrect. Zander has recently pointed out (Vereins-Beilage der Deutsche Med. Wochenschrift, 1897, III., p. 13) that the hypophysis generally lies wholly or partly in front, not behind the chiasma, and its anterior part is so much nearer the optic nerves than its posterior part is to the chiasma (on account of the nerves, chiasma, and tracts slanting upward posteriorly), that with a uniform enlargement of the gland the nerves in front of the chiasma would almost always be pressed upon sooner than the chiasma itself.

Another point worth noting is that in spite of the gloomy prospect for good vision which Case I at one time presented, after more than a year the sight was 20-30 with each eye, and I have heard since that it continues to be good. Current accounts would lead one to expect progressive optic nerve atrophy, ending in blindness, in all cases where serious disturbance of the sight has set in.

Digitized by Google

THE MENSTRUAL FUNCTION IN INSANE PATIENTS AND THE EFFECTS OF OVARIOTOMY.*

BY MINERVA M. NEWBECKER, M. D.,
ASYLUM, NEB.,
SECOND ASSISTANT PHYSICIAN, NEBRASKA HOSPITAL FOR INSANE.

An opinion prevails quite extensively that uterine diseases are largely responsible for insanity in women. There is no inquiry so frequently made by the friends of the female patients at the asylum as that regarding the restoration of the menstrual function. The general impression seems to be that if suspended menstruation can be once more established, the worst is over and the patient is in a fair way to recover. This feeling is also shared by the patients themselves. It is nothing unusual for patients who are mildly insane, or the more violent at rational intervals, to ask for medicine "to bring them 'round." (I use their own expression.) I have one woman in my violent ward who menstruates regularly, and after each period comes to me and says, "I was sick this week; now can't I go home?" Yet this woman has been in the asylum for five years, and is no better mentally than when she entered. Some will refuse to take medicine unless they believe it will cause a return of the monthly flow—so fixed is the idea of the relation of the menstrual function to disease of body and mind.

With these facts before me, I set out to investigate the subject, and met with the usual disappointments. In the first place, the physician can gain no reliable information from the patients themselves. They can give no account of their condition, even if they attempt it. Their history is so distorted with their delusions as to render it valueless. The "physicians' returns" are little more to be depended upon, as the examining board labors under the same difficulty as the hospital doctor. A physical examination cannot be made in the case of many patients without the use of an anesthetic, and to give chloroform or ether to a wildly maniacal patient requires such a struggle as to render the undertaking dangerous, both to patient and physician, so that, in the majority of patients thus examined, the ends do not justify the means. With the milder cases examination and treatment are possible, though not always satisfactory, on account of the peculiar and disagreeable delusions cherished by a large majority of these patients. For these, and other reasons, hospital records are liable to be more or less inaccurate, especially on this particular subject.

In order to arrive at some approximately correct conclusions, I have taken the histories of 200 patients under my care during the last year and a half. Patients varying in age from 16 to 78 years, the greater number being between 25 and 50 years of age. Of these 180 were in the house at one time, the remaining 20 having been discharged or transferred within a few months. Of this number I find 54 had passed the climacteric when they entered the hospital; 50 menstruated in one or two months after entering; 74 menstruated in from three or four months to a year after; 1 not until two years; 19 not at all; and 2 were ovariotomy cases. Of the 50 who had no cessation of the menstrual flow, or omitted but one or two months, all are chronic cases, excepting seven. These latter have been in the hospital but a few months and are liable to recover. The larger number who suffered from temporary amenorrhea have had the menstrual function restored in from four to six or eight months. There are comparatively few instances where it has been delayed for a year or more, and I have found but one in which it was resumed after two years. This was a case of acute melancholia, the patient being persistently suicidal, with homicidal tendencies. She refused to eat, part of the time requiring to be fed with a tube. Frequently she managed to free herself from restraints that were used to keep her in bed at night, and once was discovered in the act of trying to hang herself. To prepare her for bed and clothe her in the morning was no light task. This was kept up for nearly two years; she then became more tractable, when her health improved also, and at the expiration of about two years from the time of her admission to the hospital she menstruated. She has now ceased to be violent, but she rarely speaks to any one, and never goes to the table with the other patients, refusing her meals unless they are sent to her room and she is left alone. In this case delayed menstruation was evidently caused by the excited mental condition of the patient. When the violence of the disease subsided, the patient returned to regular habits of living and the menstrual function was resumed.

Among those who have not menstruated at all, or only once or twice since admission, four were in the hospital but a few months and were discharged recovered. I have not been informed in regard to their present condition, but have reason to suppose that, as they are normal in other respects, they are in regard to the menses. Several have recovered their mental status and are about to be discharged; others are improving; a few are chronically insane. One is an epileptic who suffers from many and severe convulsions. Before each attack she becomes noisy and talkative. Aftet a series of convulsions, extending over several days or a week, she is exceedingly stupid, lying in bed, unable to talk or even to feed herself. She is now twenty-eight years old and has had epilepsy for sixteen years—said to have followed sunstroke. She has been in the hospital three years and menstruated once, about a week after she entered. In short, with the exception of those who have reached the climacteric, nearly all of my chronic cases menstruate regularly. This would seem to indicate that menstrual irregulari-

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

ties cannot constitute a very strong factor in causing mental disease, otherwise a return to normal conditions would at least favorably affect, if not cure, the mental derangement. I have observed, however, that during the menses the mental symptoms are frequently exaggerated. The violent and excitable patients are more violent, and the stupid and hysterical are temporarily worse. This may be due to a disturbance in the circulation or to pelvic pain, or both; such a delicately adjusted apparatus as the nervous system must, of necessity, respond readily to disturbing influences. On the other hand, the mental condition does modify, to a great extent, the menstrual flow. In almost every case there is a cessation of the catamenia for at least one or two months, even in the mildest cases.

Two reasons may be adduced for this: One is the debilitated condition of the patient, resulting from a lack of nutrition. When the mind becomes unbalanced there is no longer that care for the physical that obtains among the sane. All healthful habits and pursuits are abandoned. Sleep is interfered with; appetite fails, or food is rejected on account of some delusion,—the fear of poison, or threats from some imaginary being. The patient lives in an unnatural world; she hears voices and sees things that annoy and frighten her. She is kept in a constant state of agitation and distress, in consequence of which the general health suffers; the excretions are more or less deranged, the menstrual flow with the rest, the same as in other acute diseases.

The other factor is imperfect innervation. We all know what a powerful influence the mind exerts upon the body through the sympathetic system. Dr. Kene says menstruation is a "nervous function" governed by the "menstruation nerve" described by Johnstone, and suggests that as there are, in the lumbar enlargement of the spinal cord, centers for micturition, defecation, parturition, etc., there is probably a menstruation center, from which the pelvic splanchnics carry impulses that run along Johnstone's nerve to the uterus. This being the case, it is easy to see why menstrual derangements are so common among insane women, and amenorrhea is the rule. Now if these patients are placed in good hygienic surroundings, are obliged to take exercise, have regular hours for meals and sleep, a majority of them soon improve physically, and with improved nutrition comes improvement in the functions of all the organs. Hence, we find the menses recurring with accustomed regularity among women who have suffered alienation for years, and are liable to spend the rest of their lives in an insane asylum.

Now, while I agree with the author already quoted, that "women will lose their reason and regain it without much help or hindrance from their reproductive organs," I do not wish to be understood as denying all etiological relations of disease of the brain and sexual organs. There are numerous cases on record showing that organic diseases of the generative organs have, either directly or indirectly, caused insanity. All serious diseases of the ovaries, uterus, and vagina, resulting in change of structure or position, impair the general health and react upon the mental faculties; especially is this liable to be the case where there is any taint of heredity, and I think that heredity is an underlying cause that frequently never comes to the knowledge of the physician. It follows, then, that since these diseases produce insanity, they may be active agents in keeping up the condition, and retard or prevent mental improvement. Such cases call for active interference, but here again the physician is confronted by a serious difficulty. Treatment that would be accompanied by but little risk in the sane becomes extremely dangerous in the alien. The only laparotomy I ever saw performed upon an insane person resulted in death. The operation was performed without a flaw, the patient recovered readily from the effects of the ether, but all attempts to keep her quiet were ineffectual. In a moment, without the slightest warning, she seized the iron rod at the head of the bed, drew herself up by both hands, and before the astonished nurse could prevent it, jumped out upon the floor. The violence of the act tore out the stitches, and in spite of immediate attention she died within thirty-six hours. The woman was known to be unsound mentally, but had not been violent while in the hospital. It might be argued that such an accident would not have happened in an insane asylum, with all its appliances for restraining violent patients, but I have never seen apparatus so complete as to prevent injury to a serious wound through the persistent struggles of a maniac.

This brings me to a consideration of my two ovariotomy cases, one of which is still in the hospital. This patient was admitted in June, 1896, and has the following history, given in the physician's return: "Patient is 36 years old; married; has no children. There is no insanity in the family; her father died at 60 years of age, mother living, age 73 years. Menstruation, somewhat irregular and scanty. In April, 1895, the uterus was curetted. In October, 1895, the uterus and ovaries were removed, also piles and papillæ of the rectum, with dilatation of the urethra." Then follows a description of the mental state: "Patient dull and stupid; wanders away from home; will not talk, careless in dress, etc."

The patient, who is a fairly intelligent woman, suffering from subacute melancholia, gives this account of herself: She was delicate as a child; menstruation was very scanty and irregular, occurring at intervals of from three to six weeks. She married, at 26 years, a widower with a number of children, and she "never could get along with his family." Her husband required too much of her as a wife; her health broke down and there was domestic trouble. Finally she was placed under the care of a physician, at which time the curetting was done. Later she became pregnant

Digitized by Google

and had a miscarriage, at about six weeks. Some time after this she had the operation for removal of the ovaries and uterus, per vaginam; she has not menstruated since. Examination reveals a clean wound, well healed, and all the parts in a healthy condition, but there is no amelioration of her mental symptoms. Whether or not the operation was done to improve the mental condition, as well as the physical, I do not know. Her husband said "they thought it would improve her mind," and states that she was better for a short time after the operation, but soon relapsed.

No. 2 has the following history, also copied from physician's return: "Patient is 24 years old; single; is of a nervous temperament, and suffered much from headaches before she became insane. A third cousin, on the mother's side, died in an asylum. About three and a half years ago she became violent and disobedient; laughed and cried without cause, sometimes refused to talk, etc. Exciting cause, la grippe and overstudy. A year ago her ovaries were removed and she was better for about six months; menstruation ceased." This patient was in the hospital a little over three months. She brightened up, was less resistive, and became quite agreeable, when her mother came and took her home. After an absence of a year, her mother writes that her daughter has grown worse and it will be necessary to return her to the hospital. She is now awaiting admission. In neither of these cases was there any marked change in the mental condition after the operation. What little improvement was manifested is no more than one would expect in any case from enforced quiet, rest in bed, and judicious medical treatment.

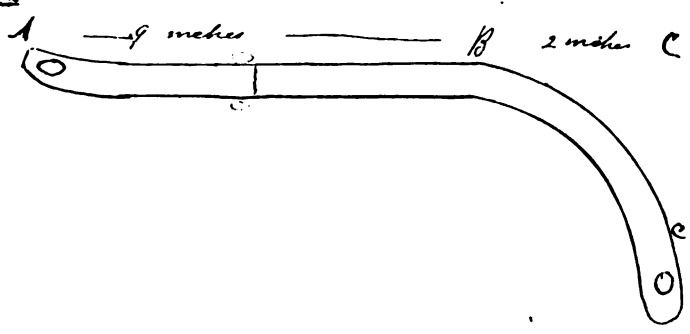
In closing, let me give an extract from a letter I received from Dr. Alice Bennett, late of the Norristown Hospital for the Insane, in Pennsylvania. She says: "I think the cases very rare where the suppression of the menses has a causative influence in producing mental aberration. I believe such cases do occur, but rarely. I remember one young German girl, with a flexion of the uterus, who became insane and committed a violent assault at the time when the menses should have come. She came to us as a criminal patient, and seemed to be entirely restored by appropriate treatment. On the other hand, there is nothing more common, and more natural, than for the menstrual function to be interfered with in cases of acute insanity. We habitually expect it to be suppressed, and to return naturally when mental health is restored. Cause and effect are very commonly confused among the laity, and even among physicians who have not had experience of such cases. Often the family beg us to 'give something to bring on the sickness,' being sure that nothing else is required to bring back the mental health. When a condition of chronicity has been reached, generally the menstrual function is regularly performed, but, with few exceptions, the mental symptoms are worse at such times.

"As to removal of the ovaries as a cure for insanity, it is very much overestimated, in my opinion. I believe if the fact of a diseased condition of the ovaries can be established, that the operation is justified and even demanded, although even then the cautious physician will not promise a cure. A number of cases have been brought to us (at Norristown) of chronic insanity, with a history of removal of the ovaries at some preceding stage. I was instrumental in having six cases done at Norristown. One case died of peritonitis; three recovered; one, a chronic case, which began as puerperal mania, was much improved; one with epileptic seizures of puerperal origin was rather worse, if anything. In the last two the ovaries were very much diseased. Two of the recovered cases might have recovered without the operation, as they were of short duration. One of the two has since passed successfully through a second attack. The third was, I believe, really cured by the removal of much diseased ovaries. A good deal more testimony is needed, as you see."

MODIFICATION OF THE FEMALE CATHETER.

OMAHA, NEB., May 22, 1897.

Editor Western Medical Review: For some time I have been studying the subject of the female catheter, with a view to improving that useful instrument. It has been my experience, and, no doubt, the experience of the medical profession at large, that the present metallic female catheter is too short, and unsatisfactory, for the reason that in spite of all our care in using it, the urine will dribble down over the buttocks and perineum of the patient, and in cases where an operation has been performed for laceration of the vagina



or perineum this dribbling of the urine may have a deleterious effect upon the healing of the wound.

To overcome this defect I have had my pocket case catheter altered in the following way: Rings removed from head of catheter shaft and a screw thread cut on end that rings were removed from. On to the new screw point, when desiring to use the instrument, screw the curved male portion of the catheter, and you have an instrument that projects far beyond the line of perineum or buttocks, and the urine is discharged freely into the bed pan without soiling the patient's person or endangering a healing perineum. (See cut.)

ROBERT E. ESKILDSON, M. D.

Digitized by Google

STERCORIN AND CHOLESTEREMIA.*

By AUSTIN FLINT, M. D.,

NEW YORK, N. Y.,

PROFESSOR OF PHYSIOLOGY IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; CONSULTING PHYSICIAN TO BELLEVUE HOSPITAL; CONSULTING PHYSICIAN TO THE MANHATTAN STATE HOSPITAL, ETC.

It is the prerogative of the presiding officer of this association to make recommendations, and this is not the province of one appointed simply to give an anniversary discourse. The remainder of the time that has been placed at my disposal I shall venture to occupy with a subject which I hope may not prove entirely unworthy of your attention.

While the presentation, on this occasion, of researches made and published thirty-five years ago —viewing the question from a physiologic standpoint—calls for an explanation and perhaps an apology, none is required if their great importance in relation to the pathology of the liver be considered, especially as cholesteremia is by no means accepted as a distinct pathologic condition. Were it not that stercorin has just been rediscovered in Germany by two eminent physiologic chemists, who make no mention of its full description in 1862 and have even called it by another name, I probably should not have repeated and extended my original observations. As it is, however, I feel that I may properly, as an American investigator, make my reclamation before the American Medical Association. Although my paper, published in the American Journal of the Medical Sciences in October, 1862, received an "honorable" mention and substantial recognition from the Institute of France, and my observations have been verified and extended by French and German investigators, many writers on physiology and pathology, even the most recent, fail to recognize such a substance as stercorin, and, in treating of cholesterin, speak of its function as obscure or unknown.† In An American Text-Book of Physiology, Philadelphia, 1896, cholesterin is described as a constant constituent of the bile, very widely distributed in the body, and eliminated by the liver cells from the blood. "That it is an excretion is indicated by the fact that it is eliminated unchanged in the feces." Stercorin is not mentioned. As a matter of fact, cholesterin does not occur in the human feces in health, and its presence in this situation is exceptional.

In Hoppe-Seyler's Zeitschrift für Physiologische Chemie, Strassburg, 1896, is a paper by Bondzynski and Humnicki entitled "The Destination of Cholesterin in the Animal Organism." The authors claim to have discovered a new constituent of the human feces, which they call "koprosterin." This substance is identical with stercorin, fully described in 1862. The original stercorin, of which specimens obtained in 1862 are in my possession, was extracted from the human feces by the following process: The dried and pulverized feces were extracted with ether. The ethereal extract was passed through animal charcoal and afterward evaporated. The residue was then extracted with boiling alcohol. The alcoholic extract was treated with potassium hydrate solution, at a temperature near the boiling point of water, in order to remove the fats by saponification, which were washed out with water until the filtrate was neutral and perfectly clear. The filtrate was dried, extracted with ether, and the ethereal extract evaporated to dryness and extracted with boiling alcohol. The stercorin was obtained from the alcoholic extract by repeated crystallization. This process was exactly repeated in our recent observations, and, at the same time, stercorin was extracted by the process described by Bondzynski and Humnicki.

The opinion expressed by Hoppe-Seyler, Hofmann, and, indeed, many others, that stercorin simply is impure cholesterin, cannot have been based upon a practical knowledge of this substance. Stercorin has a well-defined formula—$C_{27}H_{48}O$—which has been calculated and verified by the formation of esters. Its crystals are quite different from crystals of cholesterin, and are invariable in form, arrangement, and color. It was extracted by methods practically the same as those used in the extraction of cholesterin. In view of these facts, to assume that stercorin is an impure substance, one must deny a positive scientific basis to organic chemistry.

In the recent, as well as in the original, observations, it was clearly shown that cholesterin is changed into stercorin in passing down the intestinal canal. I found that this change involved processes incidental to intestinal digestion. Cholesterin and no stercorin was found in the feces of fasting animals and in the meconium. Bondzynski and Humnicki found an increased proportion of "koprosterin" in human feces after the ingestion of a certain quantity of cholesterin. They also showed that cholesterin unites readily with bromin, while "koprosterin" forms no such combination; and, indeed, by the use of bromin, these two substances may be separated when they exist together. They confirmed the empirical formula for their product by the formation of a number of esters.

It is now generally admitted that the bile, in addition to its function connected with digestion, contains one or more excrementitious matters. Taking into consideration the various ingredients of the bile, there seems to be but one which can logically be compared to urea. Cholesterin is found in many of the tissues and organs of the body and exists in the blood. Likening it to urea, it becomes a question whether it is formed in the liver and discharged in the bile or is merely separated from the blood by the liver and excreted.

Passing from these observations to the pathologic relations of cholesterin, after examining three specimens of normal blood and finding the

* Abstract of an address delivered at the Semi-Centennial Anniversary of the American Medical Association, Philadelphia, June 2, 1896.

† Foster, "A Text-book of Physiology," 1895, p. 653.

Digitized by Google

proportion of cholesterin from 0.445 to 0.751 of a part per thousand, examinations were made of the blood of patients with simple jaundice and those with what is called icterus gravis, the cases terminating fatally, with grave nervous symptoms. In a case of simple jaundice, terminating in recovery at the end of about four weeks, the blood contained 0.508 of a part per thousand; well within the limits in normal blood. In a case of jaundice with cirrhosis, terminating fatally with serious nervous disturbance, the blood taken six days before death contained 1.850 part per thousand of cholesterin—an immense increase over the normal proportion. In this case, on post-mortem examination, the liver was found contracted, and the gall-bladder was shrunken, containing only about seven cubic centimeters of bile.

The question of cholesteremia has been much discussed since 1862, for the most part with scant approval or without acceptance. However, Picot,* in 1872, reported a fatal case of "grave jaundice" in which he determined a great increase in the proportion of cholesterin in the blood, 1.804 parts per thousand. Many attempts have been made, also, to produce toxic effects by injecting cholesterin into the blood, but most of them have been unsuccessful on account of mechanic obstruction of the blood vessels. In 1873, however, Koloman Müller† succeeded by injecting cholesterin rubbed with glycerin and mixed with soap and water. In five experiments on dogs, injecting in each 0.045 gram of cholesterin, he produced a complete representation of the phenomena of "grave jaundice."

It must be remembered that the liver is by far the largest gland in the body; that it secretes a fluid which is known to have a double function, one connected with digestion and the other with the elimination of cholesterin; that the blood from the digestive tract all passes through this organ, where it undergoes certain changes; that it probably stores up the products of amylolytic digestion in the form of glycogen; that it arrests certain poisons, and that it is the chief organ concerned in the production of urea, which is discharged by the kidneys. It may have other uses in what is now called internal secretion, in addition to that of destruction of blood corpuscles and the change of hemoglobin into bilirubin. With all these known varied uses of the liver, however, the pathology of hepatic diseases is most obscure. We do not know, even, the cause and mechanism of the formation of gall stones, which are often composed almost entirely of cholesterin.

The term acholia, as used in pathology, now means very little and conveys no distinct idea of the causes of the nervous symptoms which attend this condition. The term cholemia is generally regarded as almost synonymous with jaundice. If cholesteremia be recognized as a distinct pathologic condition, with symptoms due either to the accumulation of cholesterin in the blood, acting as a toxic substance, or to imperfect separation of cholesterin from the nervous tissue, a positive advance will be made in our knowledge of the pathology of many obscure liver disorders.

The quantitative estimation of cholesterin in the blood is not difficult, and it does not require more than from four to six or eight grams of blood. The only tedious manipulations are the drying, saponification, and weighing; and these are readily done in a well-appointed laboratory. Some process may be devised which will expedite this extraction. If examinations of the blood were to be made in cases of obscure nervous disturbance, in epilepsy and other disorders of this nature, it is possible that cholesterin may be found to play an important part in their pathology. The fact that bromin readily combines with cholesterin, taken in connection with the wide use of the bromids in diseases of the nervous system, is very suggestive. May not the bromids promote the elimination of cholesterin, a substance which is so insoluble and which forms few combinations? These points seem well worthy of the consideration of pathologists and therapeutists. Certainly the physiologic and pathologic relations of cholesterin offer a wide, and perhaps fruitful, field for further observation.

* Journal de l'Anatomie, Paris, 1872, tome viii, p. 247, et seq.

† "Ueber Cholesteraemie," Archiv. fuer experimentelle Pathologie und Pharmakologie, Leipzig, 1873, Bd. i, S. 213, et seq.

OPERATIVE TREATMENT OF CANCER OF THE LOWER LIP.*

By BYRON B. DAVIS, M. D.,
OMAHA, NEB.,
SURGEON TO IMMANUEL HOSPITAL.

Statistics are proverbially misleading. The peculiar personal equation which enters into their compilation renders medical statistics especially untrustworthy. When the statistics of cures in malignant disease are considered an unquestioned acceptance will deceive the credulous, to their future torment, if the final fate of their own cases be closely watched.

This is not intended to be an arraignment of the honesty of the clinical reporter, for I believe the majority of surgeons intend to be impersonal in their findings. But several factors which lack certainty enter into statistical reports.

A man will have performed thirty operations for carcinoma of the breast, and two or three years later he makes an honest effort to complete their histories. A letter of inquiry is addressed to each of the patients or her friends, and in due time information is received of fifteen of the number, showing that three of them are well and that twelve are dead or have recurrence of the disease. To the other fifteen letters no answers are returned. Now the enthusiastic statistician reasons that the ratio of the fifteen from whom no replies are received is probably the same as of the fifteen whose records are known. He therefore has three

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

cures in fifteen operations, or a ratio of 20 per cent. of successes.

This mode of computation is a perversion of facts. Cured patients are almost sure to make their condition known. A feeling of gratitude prompts them to do so. It would therefore seem more nearly correct to base the ratio of cures upon the entire thirty patients operated upon, making three cures in thirty, or 10 per cent., instead of 20 per cent., which is claimed.

It is also possible that of the three cases reported as cured, one or more may already be suffering from a slow, insidious metastasis, and if any of them should die a few months after the paper is published, the author rarely deems it necessary to publish an appendix to his article informing his readers of the real facts.

Patients reported as dying of some intercurrent disease should also be investigated with great care. The diagnosis of secondary growths in the viscera is often difficult, and physicians often hesitate to express an opinion which is likely to alarm their patients. One of my own patients is a case in point. I operated upon a lady for mammary carcinoma. Before I lost sight of her there was no doubt in my mind that she had cancer of the lung, and her friends were apprised of that fact. After her death I was informed that she had died of pulmonary tuberculosis.

Another factor which is likely to make statistics more favorable than the facts warrant is the difficulty of diagnosis early in the disease. Operations are undertaken, and correctly so, at a time when neither the clinical nor the microscopical pictures are absolutely unassailable. Justification for this is found in the more favorable results obtained when the operation is done early. Herbert Snow, of London, lays down the dictum that every tumor of the breast of a woman above the age of 35 years should be considered malignant, and treated accordingly. For he says that if the tumor is not cancerous, it is almost sure to become so. This is undoubtedly good practice, and if consistently followed would save many lives; but a growth removed in the precancerous stage should not be used in compiling cancer statistics.

Again, it is the man who has made what he considers a good record who is most likely to report his cases. He becomes enthusiastic over his successes, and, with the most honest intentions, makes his picture as bright as the conditions will warrant. His neighbor, as good a surgeon as himself, finding that his record is not as good, discreetly holds his peace.

The errors here pointed out are self-perpetuating. The surgical statistician brings together and averages the results from a number of published reports, and arrives at the conclusion that he has obtained an approximately correct result. The real per cent. of cures is probably far below this; but the text-books are taken as authority, and we are narcotized into the belief that results are not so very unfavorable.

This sounds pessimistic. But the truest optimism is not that which, with closed eyes, refuses to see evils, but that which, with keen scrutiny, recognizes the evils which exist and takes measures to circumvent them. The general who persistently underestimates the strength of the enemy is easily overcome in battle. The great military commanders are men who recognize the difficulties with which they must cope and lay their plans accordingly.

These reflections were called forth by a contemplation of the wide gulf between what I believe to be the true mortality from carcinoma of the lower lip and what the usual published statistics would lead one to believe. Statements are often made that this form of carcinoma is one in which the prognosis is favorable, and tables of recoveries ranging from 30 to 70 per cent. are published.

That I am not alone in these views will be shown by a quotation from Bevan in Parks' Surgery by American Authors: "The prognosis of carcinoma of the lip is that of carcinoma elsewhere. * * * There has been a persistent effort made within the last few years by surgeons in various specialties to improve the prognosis in carcinoma, and this has led to the publication of conflicting statistics, some surgeons claiming as high as 25 or 30 per cent. of permanent cures, or rather cases which have had no recurrence for three years after the operation. Most of these very favorable statistics are the result of juggling, the reporters being dishonest, at least with themselves. Permanent cure after operation for carcinoma is not common, and such cures, at present at least, form but a small percentage of our cases, probably 10 per cent., and are to be looked for, not in the extensive operations demanding wide removal and removal of adjoining lymphatics, but in the early, simple cases, where a V-shaped incision of the lower lip will remove all of the carcinomatous tissue."

The percentage of cures given by Bevan is without doubt more nearly correct than that usually claimed. But his last statement cannot be permitted to go unchallenged. It is a well established fact that cases in which glandular infection has occurred have been cured by thorough removal and enjoyed life for many years.

Koenig states in the last edition of his work on surgery that in cases of cancer of the lower lip he removes the glands under the jaw if they are felt to be diseased. Otherwise he is content with the simple removal of a liberal V-shaped segment from the lip. It is my impression that this is the rule with the majority of surgeons at the present time.

The chief object of my appearance before this society to-day is to plead for something more than this. In no case can we be sure that the disease is still localized in the lip. Unless the glands are

Digitized by Google

much enlarged and indurated they cannot be felt. It is our plain duty to our patients to allow no measure to be neglected if it will add to their chance for life.

Axillary glands which cannot be felt before the operation for mammary carcinoma are often found distinctly enlarged when the axilla is opened, and presenting the typical macro- and microscopical picture of malignancy. This is even more true of the glands under the jaw. It is more difficult to feel them. Only a few weeks ago I met with a case in point. A hearty man with a small carcinomatous ulcer of the lower lip was brought to me by his family physician. It was of only a few months' existence, and much doubt had been expressed as to the true diagnosis. Not the slightest trace of glandular enlargement could be detected. With only the half-hearted concurrence of the physician, a progressive man, and almost against the protest of the patient, who could not be brought to realize the gravity of the condition, I did a thorough operation, clearing the submaxillary spaces of fat and lymphatic glands. One gland was found as large as a small marble, and on microscopic examination it was found to be distinctly carcinomatous.

This case has strengthened my conviction that the submaxillary space should always be opened and emptied, for if there is ever a case which looks as if the simple time-honored V-shaped incision would be sufficient, the one just mentioned would match it in every way. Therefore I purpose to apply the rule in all cases.

Whether the submaxillary and sublingual salivary glands should be removed or not will depend upon the conditions found. If on exposure we find them macroscopically normal, and with no enlarged lymphatic glands in their vicinity, it will be prudent to allow them to remain. But if they do not seem absolutely normal, or if adjacent lymphatic glands or fat are diseased, they should be relentlessly sacrificed. The lymphatic glands are so much more intimately connected with the lip than the salivary that the former are likely to be considerably diseased before the infection has extended to the latter.

Already a sufficient number of people have been deprived of their submaxillary and sublingual salivary glands to establish beyond cavil that their loss does not interfere with body nutrition. To avoid retrograde infection of the wound from the oral cavity, it is important that the salivary ducts should, as far as possible, be carefully ligated.

In regard to the technique only a few words need be said. Most works on operative surgery give complete details. The chief point of importance is to make the incision continuous from the lip over the point of the chin, and to continue it laterally under the ramus of each jaw. This gives an opportunity to include in the extirpation not only the original carcinomatous lip border and the glands, but also the lymphatic vessels through which the infection must pass in order to reach the glands. I look upon the removal of this connecting tract as equally important to the removal of the tissues connecting the axillary glands with the breast in mammary cancer.

To summarize, in conclusion:

1. At the first hint of the possibility of cancer of the lip a thorough macro- and microscopical examination should be made.
2. If found to be carcinoma an immediate operation should be performed.
3. The submaxillary space should be cleared of all lymphatic glands and fat in every case, and, unless found absolutely normal, the salivary glands should also be sacrificed.
4. The subcutaneous connective tissue over the chin contains lymphatic vessels connecting lip and glands, and should always be extirpated.

A MAN who stops taking a journal without paying his subscription in full is rarely encountered in the high walks of life. His place is with the creeping things of earth, and there he is usually found.

IN a certain New York nursery, as soon as a child begins to cry, the nurse catches it up, holds it gently, and places her hand over its nose and mouth, so that it cannot breathe (Med. Record). The crying ceases directly and the child is allowed to breathe freely again. Should it a second time attempt to scream, the same simple and effectual method is applied. This is repeated until the baby imagines that the painful stoppage of the breath is caused by its own effort to scream, and so is careful to keep quiet.

MYXEDEMA FOLLOWING EXTIRPATION OF AN ACCESSORY THYROID AT THE BASE OF THE TONGUE.—The following rare and interesting case is reported by Seldowitsch (Centralblatt für Chirurgie, 17, 1897): A 14-year-old girl of perfectly normal health and development had complained for some months of slight difficulty in swallowing. An examination of the throat revealed a tumor the size of a cherry at the base of the tongue. This was extirpated with the electrocautery snare, and was found to consist of characteristic thyroid tissue. The healing was uneventful and the girl went home cured of her difficulty. Seven months later she was brought back with the typical symptoms, physical and mental, of well developed myxedema. Treatment with thyroedin produced a rapid disappearance of the myxedema, and the treatment was being kept up at last accounts, with continued good results. In this case the normal thyroid could not be felt through the skin, and undoubtedly was absent or degenerated. So far as the writer knows, this experience stands alone in medical literature, but it teaches the desirability of going slowly in the extirpation of accessory thyroids, wherever situated.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$1 00
Single copies..... 10

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, JUNE 15, 1897.

This number of the WESTERN MEDICAL REVIEW will fall into the hands of many who are not subscribers. To such we would say: This is our method of advertising. However, do not expect to get another copy unless you send for it. If you think that the REVIEW is worth a dollar a year let us have your dollar.

IOWA AND NEBRASKA

Committees have been appointed by the respective state societies of Iowa and Nebraska to arrange for a joint session next year. This idea pleases the REVIEW, and we suggest that the committees meet at Council Bluffs at the September meeting of the Medical Society of the Missouri Valley. The Nebraska society will meet at Omaha, but we understand that a constitutional provision makes it imperative on the Iowa society to meet at Des Moines. This difficulty might, in a measure, be overcome by the Iowa society adjourning one day before the Nebraska society and holding a joint session, say of four or five hours, in Omaha. In that time there could be an address on medicine and one on surgery of thirty minutes each, and four papers of forty minutes each, twenty for reading and twenty for discussion.

A joint banquet ought to be one of the most enjoyable things imaginable, and certainly there could be no constitutional hindrance to that. We suggest Omaha because next year the Trans-Mississippi and International Exposition will be there and every one will want to attend. We sincerely hope that the committees may make some satisfactory arrangements for a joint session. We believe it would subserve the best interest of the profession of the two states, by adding to their professional knowledge, extending their personal acquaintance, and widening their sympathies.

THE ADMISSION TO MEMBERSHIP IN THE NEBRASKA STATE MEDICAL SOCIETY.

No one who had an opportunity to enjoy the pleasures and profits of attendance on this year's meeting of the Nebraska State Medical Society, at Lincoln, could have failed in the conclusion that it was a most successful meeting, both as to the number of members in attendance, the excellent papers and their interested and intelligent discussion in the two sections, and the royal entertainment had at the banquet. Little, indeed, was left to criticise. And for that reason the members, we doubt not, will feel kindly inclined towards us for offering an objection to the methods employed in the admission of new members. This objection is twofold: First, in behalf of some of the new members, and secondly, because of the infraction upon the clear provisions of the constitution.

In regard to the latter, it may be well to quote the text of that part of the constitution referred to. Article II, section 3, reads: "Each applicant for permanent membership shall fill out and sign the following blank application. [Here follows the form, which must be endorsed by two permanent members of the society.] When duly executed the application must be returned to the secretary, with an enclosure of $5 (the membership fee of three (3) dollars and the yearly dues of two (2) dollars, which sum will be returned to the applicant if he is not made a member. Immediately upon the receipt of the application the secretary shall transmit the same to the member of the committee on credentials in whose district (congressional) the applicant resides. This member shall be required to report in writing upon the application, which shall have attached thereto all correspondence had regarding the applicant. All applications for membership in the hands of the members of the committee on credentials must be forwarded to the chairman (the secretary) promptly, or sent to the chairman of the committee on arrangements at least five (5) days prior to the yearly meeting of the society. All applications for membership must be made at least one month before the annual meeting."

Can there be any provision more plain? And yet it is violated every session, and for no other reason than the desire of the respective commit-

Digitized by Google

tees on credentials not to refuse presumably very worthy gentlemen the boon of membership and participation in the yearly meetings. This difficulty can easily be obviated by the following procedure:

All applications, received by the committee on credentials too late for consideration in accordance with the plain provisions of the constitution, shall be laid over for action to the next annual meeting, and the members of the committee on credentials shall, if such applicants are in attendance, move their election as members by invitation, which will procure for such applicants all the privileges of the annual meeting, except a vote in the business meetings of the society—a loss which they can certainly sustain without grieving, in consequence of not having made application at least one month before the time of meeting.

Little need be said as to the injustice done to new members who have complied with the provisions of the constitution. It is self-evident that a close scrutiny of their professional and personal past must be agreeable to all ladies and gentlemen who prefer to associate exclusively with their own kind; yet when at the yearly meetings persons, numerically without end, are railroaded into the society, presumably ladies and gentlemen, upon a majority vote of the society, then the injustice to those who have complied with the letter and the spirit of the constitution becomes glaringly apparent, and it should be stopped.

Nebraska citizenship is based on "equality before the law," and it should be carefully adhered to in the choice of membership in so honorable a body as the Nebraska State Medical Society.

The present method is far from such practice. Whether the provisions of the constitution are wise is a question for the society to answer. We think they are excellent. Happily, we are assured that at the Omaha meeting it will be impossible to continue the loose business. Objections will lie against it. We trust, therefore, that we are only recording history, and thus early throw out a hint for prompt and early action of possible applicants for membership in the Nebraska State Medical Society. V. MANSFELDE.

STRYCHNIA IN PULMONARY TUBERCULOSIS.

In a paper presented at the meeting of the American Medical Association at Atlanta, last year, Dr. Thomas J. Mays, of Philadelphia, advocated the use of strychnia in the treatment of pulmonary tuberculosis. He quoted a case related by Dr. William Pepper, in the University Medical Magazine (December, 1895), of apparent cure of a case of consumption by this drug. This mode of treatment has for its basis the theory that the disease is primarily an exhausted or debilitated condition of the nervous system, resulting in an inability of the economy to resist the inroads of the bacillus tuberculosis.

It has long been the established belief that in some way or other phthisis is etiologically dependent upon a depraved physical condition, hereditary or acquired, or both. The clinical evidence of this is unimpeachable. To locate the fault in the nervous system is a step forward in the direction of exactness and is entirely in harmony with established ideas of the pathology of the disease. Furthermore, even a casual consideration of the subject will render apparent a strong argument in support of this doctrine.

Strychnine exerts its action upon the nervous system. In small doses it stimulates, in larger doses it tetanizes, and in still larger doses produces paralysis. The effort, in its administration in this disease, is to give the drug in the maximum stimulating dose, and to maintain this maximum. To safely bring this about a small dose, say 1-30 grain four times a day, is given for a week. The dose during the next week is increased to 1-24 grain four times a day. Then, at intervals of a week, it is increased to 1-20, 1-16, 1-12 grain, and more as it can be borne. When tetanic symptoms appear the dose is reduced somewhat and gradually increased again. When this process has been employed one, two, or three times it will usually be found that what had at first proven too great a dose will be taken with no ill effect, and the effort should then be directed to a still further increase.

Adopting the suggestion of Dr. Mays, the writer during the past eight months has made use of this treatment in some fifteen cases in various stages of the disease. Most of these, being dispensary patients, have not been able to be observed with sufficient accuracy, or during a length of time sufficient to yield conclusions of any value. A single case, briefly told, will illustrate the treatment:

Mrs. B., American, aged 28, presented herself at the Omaha Medical College dispensary September 16, 1896. Her family history was negative, with the exception that one brother has phthisis. The patient has had no serious illness prior to the

Digitized by Google

present, which began two months ago. She now complains of a cough, with abundant muco-purulent, foul-smelling expectoration. She spits up blood nearly every day, sometimes in considerable quantity. She has fever, profuse night sweats, dyspnea, voice husky, pain in both sides of the chest. She has lost twenty pounds in weight during the last two months. She has a poor appetite, with frequent vomiting after meals, and is generally weak and exhausted. Physical examination reveals the presence of an area of consolidation at each apex, more extensive on the right side.

On November 20, a trifle less than two months from the beginning of treatment, the patient had gained thirteen pounds in weight. Improvement in every particular was noted within a few days from the beginning of the treatment, and at the time of this note the only symptoms remaining to indicate the presence of diseased lungs were a cough, not severe, with some expectoration, and occasionally a feeling of discomfort in the chest. The physical signs indicated decided improvement. The patient took strychnia according to the plan already outlined. She had no other medicine whatever, except a dose each evening, for a few days, to hasten the arrest of night sweats. The daily hemorrhages ceased immediately, but recurred once, three weeks later, when she had been for four days without strychnia.

With the exception of a brief period of retrogression, dependent upon the depressing effects resulting from the death of her phthisical brother in April last, the patient has steadily improved. The brother and sister developed the disease at about the same time, and he responded to the strychnia treatment with even more alacrity than his sister, but was persuaded to abandon it for Edson's "Aseptolin."

Mrs. B. is now taking a shade less than 1-6 grain of strychnia four times a day, the dose being increased from time to time. She is at her normal weight and feels perfectly well, except for a little pain occasionally over the right apex, and a slight coughing spell once or twice a day, with expectoration sometimes. The physical signs show steady gain, but do not indicate so great a degree of improvement in the lungs as has occurred in the patient's general condition. It seems to be true, in all cases, that the improvement in the lungs is not able to keep pace with that in the patient's general condition.

The most marked beneficial effects upon the patient are observed during the time when the dose is close upon the verge of causing convulsive symptoms. We have repeatedly noted that as a tolerance developed the speed of improvement lagged, to be again accelerated upon an increase of the dose. The warning given of approaching convulsions varies in different cases, but, if repeated in the same case, will be the same symptom each time. Two patients located it in the knees—felt as if they wanted to step over some high object. Several mentioned the feeling of an inclination to throw the head back, and several spoke of a "stiffness of the jaw." These symptoms appear, if at all, within a few minutes after the dose enters the stomach, and their duration is from ten to thirty minutes.

The idea of treating tuberculosis of the lungs with strychnia is not a new one. We understand that the claim has been made, at different times and by several individuals, that the disease could be cured by it. If this is true, the apostles of the method of treatment have failed to gain the professional ear and secure for their doctrine the attention which it appears to deserve. A limited trial of the method suggests large possibilities for it, and it is to be hoped that it may receive sufficient study to establish its rightful position in the treatment of this fatal malady.

MILROY.

Notes and News.

DR. F. SIMON has removed from Craig to Oakland, Neb.

DR. BRANDT, the great advocate of the water treatment of typhoid fever, died recently in Stettin, Germany, aged 71.

THE Washington State Medical Society held its annual meeting on the 11th and 12th of May. It meets at Seattle next year.

THE Ohio State Medical Society has a total membership of nearly 900, and about 300 attended the annual meeting at Cleveland last month.

A DIPLOMA from the Eclectic Medical College does not, according to a recent decision of Judge Nulan, of Milwaukee, give the holder a legal right to practice medicine in Wisconsin.

NEBRASKA was represented at the meeting of the A. M. A. at Philadelphia by Drs. B. B. Davis, E. W. Lee, R. C. Moore, J. P. Lord, A. F. Jonas, H. Gifford, J. O. Dawson, and G. H. Simmons.

NOTHING NEW UNDER THE SUN.—Dr. Geist-Jacobi, of Frankfort, Germany, has written a history of dentistry, in which he claims that the profession was practiced in Egypt at least 5,000 years ago.

Digitized by Google

ONE of the professors of surgery at Budapest has forbidden female students to attend his clinics unless they are shorn of their glory. The female student is persistent. Will she lose her head—of hair?

THE Russian railways have decided to grant free transportation to members of the International Medical Congress to be held at Moscow. If it did not cost so much to get to Russia, we might all of us be tempted to go.

COCAIN HABIT FROM CATARRH SNUFF.—One of the Canadian journals reports a case of a woman who, after using Agnew's catarrh powder as a snuff for four months, was admitted to a Montreal hospital suffering from well-marked chronic cocainism.

EXOPHTHALMIC GOITER.—The British Medical Journal gives the following summary of twenty-four cases: Fatal termination in six; recovery complete, or almost complete, in seven; improvement in seven; condition unchanged in three; one, condition not known.

DR. CHARLES DENISON, of Denver, came very near being elected to deliver the annual address in medicine before the American Medical Association next year. He came so near that he would feel flattered did he know how few votes he lacked. The west was right in it at Philadelphia.

TUBERCULOSIS IN INFANTS.—It would seem from recent inquiry that intrauterine infection seldom happens, even when the mother is suffering with tubercular disease in an advanced form. In nearly all infants dying from tuberculosis the germ entered the system through the air passages.

IT is reported that a druggist in Chicago was recently fined $1,500 for the mistake of substituting carbolic acid in a prescription for an eye lotion, which, when used, destroyed the eyesight of a child. Another druggist was condemned in a verdict for $8,000 for a mistake made by one of his clerks in giving corrosive sublimate for calomel.

COMBINATION seems to be the order of the day. This month we chronicle the combining of two homeopathic colleges. The Cleveland University of Medicine and Surgery and the Cleveland Medical College, both homeopathic, but neither one using the name, now become one college under the title of the Cleveland Homeopathic Medical College.

DR. HAROLD GIFFORD, of Omaha, was elected chairman of the section on ophthalmology at the recent meeting of the American Medical Association, at Philadelphia. This is an honor richly deserved. To be elected chairman of a section in the A. M. A. means a good deal. It means that the man selected stands well with his fellows in the particular branch in which he works. We congratulate Dr. Gifford, and also the members of the section in the wisdom of their choice.

SCHLATTER, the divine (?) healer, is dead. At least, so it is reported. His body, or what was left of it, was recently found in the mountains near Casa Grande, Mexico, the supposition being that he had starved to death. His saddle and bridle were found hanging on the limb of a tree, under which the decomposed body lay. Letters and other things which were known to belong to him were found near by. *Requiescat in pace.*

A FAIRY story written by a young lady of six years is just out. The fairies in the book, like other mortals, become ill and require the services of the fairy physician, who discovers that one has scarlet fever, another diphtheria, and still another typhoid fever. The fairy mother is told all about microbes, etc., and is instructed to boil the water. She does not understand. If the microbe has the fever, why does not the fever, which kills the little fairies, kill the microbes? And if the microbe does not have the fever, how can it give the fever? How can a thing give a thing that it does not have? And the doctor says, "Nobody knows but God."

ANTI-SPITTING ordinances are the fad now among municipal law-makers. Columbus, O., and Rochester, N. Y., have passed ordinances prohibiting expectoration in public conveyances. San Francisco recently passed an ordinance against expectorating on the streets, and the chief of police of the city said he thought he could enforce the ordinance if he could have a hundred thousand extra men on the police force. If this filthy, as well as unhealthy, habit could be put down by legislation, or any other way, it would be a good thing and conducive to the stopping of the spread of tuberculosis, but the probability is that this generation will not see this accomplished.

DR. HOWARD A. KELLEY, of Baltimore, is busily engaged in preparing for the press a complete work on gynecology, which promises to be exhaustive, complete, and up to date. It was the writer's privilege, a few days ago, to examine many of the drawings which will be used to illustrate the work, and, judging from these, the book will be illustrated with the most practical drawings that it is possible to make. The seven to illustrate the operation of perinorrhaphy, for instance, carry one through the whole operation with a series of pictures that would seem to almost do away with the necessity of any descriptive text. The work will be ready about next October, and will be issued in two volumes by the Appletons.

AT the last session of the Ohio legislature, Cincinnati was authorized to issue $6,000,000 bonds for a new and pure water supply. This money was to be expended under the direction of a commission to be appointed by the governor. This commission has been appointed, and this is what the Lancet Clinic has to say about the men appointed: "First, a printer, a successful politician,

Digitized by Google

but with no knowledge of sanitary science; second, a steamboat captain, who has similar qualifications for the position to those of the first member; third, a distiller, of whom it may be written 'ditto;' fourth, a newspaper publisher, an excellent man, but a cripple, who has thus far never posed as an exponent of sanitary science; fifthly, and worst, a notorious quack doctor, whose appointment is a direct insult to the medical profession."

DR. ROSWELL PARK, professor of surgery at the Buffalo University Medical College, has been ill for some time, suffering from an infection wound received during an operation that he made about a year and a half ago. He recovered promptly from the initial attack, and the infection has remained latent until about four weeks ago. Since that time, however, it has reappeared, and on Thursday, May 27, 1897, after deliberate observation and consultation, Dr. John Parmenter, adjunct professor of clinical surgery, assisted by Dr. Chauncey P. Smith, removed a group of infected glands in Dr. Park's left arm. It is believed that this will terminate the manifestation of the malady and that Dr. Park will soon be well and at his surgical work as usual—a hope that his many numerous friends confidently cherish.—Buffalo Medical Journal.

AN editorial in the Colorado Medical Journal for June advocates the immediate union of the medical colleges of Denver into one. "An amalgamation of the brains and energies of these three institutions into one strong teaching body," the writer says, "would go far toward eliminating the evils and abuses of medical teaching and dispensaries, and would strengthen our position before the eyes of the world at large, without mentioning the immense advantage that would accrue by reason of better clinical, teaching, and laboratory facilities under a strongly centralized institution. Every consideration looking toward the uplifting of our profession and the attainment of a higher standard of efficiency among our young medical men appeals to those holding positions as professors and clinical instructors to sink personal differences, bury personal grievances, subordinate personal advantage, and give their instant and unqualified support to the consummation of some plan of consolidation so devoutly and earnestly to be wished for."

Miscellaneous.

TO PREPARE catgut Hoffmeister recommends as follows: (1.) Wind the catgut on a glass spool and harden in a 4 per cent. solution of formalin for twenty-four hours. (2.) Boil in water for ten minutes. (3.) Preserve in alcohol containing 5 per cent. of glycerin and 0.1 per cent. of corrosive sublimate. From the beginning to the end of the operation the catgut should remain on the same spool, and should not be touched by the fingers. This prevents it from twisting into kinks.

A NEW METHOD FOR THE PREVENTION OF THUMB-SUCKING IN CHILDREN.—Dr. G. H. Monks, of Boston, in the Boston Medical and Surgical Journal for December 31, after trying in vain various expedients to cure a five-year-old girl of thumb-sucking, adopted the following expedient: He thought he could best accomplish a cure by immobilizing the elbows at a very obtuse angle, and he therefore applied a silicate of potassium bandage to each arm, reaching nearly from shoulder to wrist. After the bandages had hardened they were split at the sides and removed. They were then carefully covered and lined with cotton flannel, the ends of the flannel being left long enough so as to project well beyond the upper and lower ends of the silicate bandages. The flannel was then stitched in such a manner that it would not shift its position. These two long tubular bandages could then, like gauntlets, be pulled on and off, as the parents wished, and in two weeks the habit was broken.

AN APPALLING SITUATION.—Without a self-regulating check on dispensary abuse it is bound to increase. No test by garment texture can separate the very poor from those able to pay. The well-to-do often come in rags, and the self-respecting poor, struggling to keep a situation, come fairly well dressed. As things are going, it is only a matter of time till most persons not possessing wealth will be drawn into the vortex. Even now the evil is so great that the majority of young medical men have no possible way of getting into practice but through dispensary work. The patients that under normal conditions would be willing to engage them now get treatment free, and when they do pay for a call the dispensary doctor gets it. The sole alternatives left them are starvation, suicide, quackery, some other business, or covert advertising. What wonder that a large multitude of graduates disappear from professional life within a few years of graduation? What wonder that there are vastly more suicides among medical men than in any other profession? As there are scores of applicants for every dispensary vacancy, what wonder that there are unseemly scrambles for such places? What wonder that the situation debases many of them into sycophants and wire-pullers? Such a struggle leads to degeneracy by favoring the survival of the mean. Such as gain the places often seek to live above the temptations of their environment by trying to do their whole duty to those they treat; but it is impossible. But a very small number are there primarily as missionaries of science. The majority are there to build up a practice. They see and know that they are being cheated out of their rights in having to do so in this manner, but they only dare to protest in a half-hearted way. Looking around them, they

Digitized by Google

discover that janitors, butchers, bakers, grocers, nurses, managers, clerks, pharmacists, porters, messengers—all are paid for their services. None of them do obeisance to the lying fetich misnamed Charity. Doctors must work as wreckers of their own profession, and be satisfied with the fragments of the wreck. If it was true charity, no one would complain. If only the needy came, and under conditions that did not debase them, how glorious a mark of our civilization all this would be! It would inspire men to do their best. Their whole hearts would be in their work. Then we would see true deeds of charity for charity's sake. Oh, that one having authority would come and scourge out of these modern temples those that are there purely as money-changers! Would he not utter the same scathing words as Christ did under similar provocation?—Am. Med. Surgical Bulletin.

USE AND ABUSE OF THE STOMACH TUBE.—Dr. Frank H. Murdock, of Pittsburg, Pa., read a paper before the Pittsburg Academy of Medicine, on November 16, which is published in the New York Medical Journal. He believes that the stomach tube is being used too indiscriminately by many physicians, and not enough by others. It should be used, first, for diagnostic purposes; second, to empty the stomach in certain forms of poisoning; third, for lavage. For diagnostic purposes the soft tube should be dipped in warm water and introduced into the stomach an hour after Ewald's test breakfast has been taken, and the contents obtained by expression. After filtering, examination is then made for hydrochloric acid and to ascertain the amount. Then for organic acids, for rennet and pepsin, for albumin, propeptone and peptone, for erythrodextrin achrodextrin, and sugar. This examination will enable us to determine what drugs, if any, are required, and it will also inform us as to what the patient should eat, a question which is always of prime importance in the treatment of these cases. The second indication for using the stomach tube is to evacuate the stomach in certain forms of poisoning. Here the soft tube should also be used, and it may be introduced into the stomach even when the patient is in a state of deep coma. It was in 1875 that Ewald, being called to see a case of prussic acid poisoning, accidentally discovered that a piece of gas tubing could be made to reach the stomach, and ever since soft tubes instead of hard ones have been in general use. The tube should not be passed in poisoning from caustic alkalies, lest the walls of the stomach might be perforated. In regard to the third point, the author says that Einhorn employs lavage in just two conditions—stagnation of food in the stomach and where a large amount of mucus is found in the organ. Ewald uses it in similar conditions and also in chronic gastritis, as a means of increasing the activity of the glands. Whenever there is a stagnation of food in the stomach there is a dilatation of the organ, and it is in this class of cases that lavage has given such brilliant results. This treatment, the author says, even when combined with proper diet and regular exercise, will only give relief so far as the subjective symptoms are concerned, but will not cure the dilatation; for when the stomach becomes chronically enlarged it never again returns to its normal size. Occasionally a large quantity of mucus is found in the stomach in cases of hyperchlorhydria, but as a rule we find it most frequently in gastric catarrh, and where the hydrochloric acid is diminished or absent. In cases where we have reason to believe that the gastric juice is absent, not on account of atrophy of the mucous membrane, but owing to causes not yet fully determined, even where there is no mucus and no dilatation, lavage may be useful in helping to restore the glands to activity. The use of the stomach tube is contraindicated in serious cardiac disease, in recent bleeding from any part, in great debility, in patients of advanced age, and in gastric ulcer.

THE TOXIN TREATMENT OF MALIGNANT TUMORS.—In the Wiener Medizinische Blätter for August 27th we find an abstract of an account by Dr. Matagne, of Brussels, of his experience in the treatment of "inoperable" malignant tumors with Dr. Coley's erysipelas and Bacillus prodigiosus toxins, originally published in the Gazette Medicale de Liege. He has employed the treatment in fourteen cases, and maintains that in one of them a complete cure was accomplished. The patient was a man, sixty-four years old, who in January, 1895, first noticed something abnormal in his mouth. In February he consulted a physician, who diagnosticated epithelioma and advised an operation, to which the patient did not consent. Many other physicians saw the patient, and they all concurred as to the diagnosis and urged the man to have an operation performed. Early in June the patient consulted Dr. Matagne. By this time he had a three-lobed tumor, which occupied the floor of the mouth. The largest lobe was as large as a nut; in the left submaxillary region there was a gland as large as a small nut—the kind of nut is not specified in either instance—and under the chin there were two other glands of the size of a bean. The tumor was hard and ulcerating, but without suppuration, and lancinating pains proceeded from it toward the left ear. In a short time the symptoms were so marked that no observer had a doubt of the epitheliomatous nature of the growth. However, no histological examination of the neoplasm was made, for fear of opening a channel for secondary infection.

The treatment was begun on the 10th of June. Five centigrammes of the toxin were injected beneath the skin of the neck below the hyoid bone. In two hours the man's temperature was 101.3 degrees F. On the 16th of June forty centi-

Digitized by Google

grammes were injected into the tumor, and hard swellings made their appearance in half an hour; the tongue remained quite swollen for two entire days. The highest temperature reached during the treatment was 105.8 degrees F. During the whole febrile period the tumor diminished in size very decidedly, and the diminution kept on after the subsidence of the fever, so that by the beginning of September not a trace of the growth remained.

Another case was one of recurrent sarcoma of the neck in a woman seventy-eight years old. The tumor was as large as an egg and situated in front of the sterno-cleido-mastoid muscle. Another tumor, of the size of a hazel nut, was seated in the masseteric region, and two small but very hard glands were to be felt under the chin. After a course of treatment lasting three months and a half, the injections being given every second day, the large tumor had wholly disappeared and the one in the masseteric region could hardly be felt, but the enlarged glands had not undergone complete involution, when the treatment was accidentally interrupted. In six months after their discontinuance there was a moderate aggravation of the disease, and the patient was advised to submit to the injections again.

In a third case, one of recurrent sarcoma of the neck of the size of a fetal head, the patient was treated with the toxins for three months, and the tumor had then shrunk to two-thirds of its original size. The patient, out of patience with the long duration of the treatment, decided to call in a surgeon, who operated with a fatal result. In a case of recurrent sarcoma of the arm the injections checked the growth of the tumor only temporarily. In one of sarcoma of the pharynx no result was noted other than a brief restraint of the growth.

The sixth case was one of deeply ulcerated sarcoma of the neck in a very debilitated man, sixty-four years old, who died during the reaction following an injection of ten cubic centimetres of the toxins, after the treatment had been carried on for five weeks. The tumor had diminished in volume a little. The seven other cases were all examples of epithelioma or carcinoma, and, save in two of them, the results were but very slight. In one of these two, a recurrent carcinoma of the breast, the injections seemed to check the growth of the tumor, for it remained stationary for several months; in the other, a uterine carcinoma, there was alleviation of the pain, together with reduction of the size of the tumor, and the improvement lasted for four months.

Such results as Dr. Matagne has reported certainly ought to encourage Dr. Coley to persevere in his labors. It is evident, we think, that the toxin treatment is of some value, more particularly in cases of sarcoma; the problem is to ascertain the class of cases in which it holds out a distinct promise of proving decidedly palliative, if not curative.

Society Proceedings.

ELKHORN VALLEY MEDICAL SOCIETY.

The midsummer meeting of the Elkhorn Valley Medical Society will be held at Norfolk, Neb., July 6. Up to the 7th the following papers had been offered: Dr. P. H. Salter, Norfolk, Recurring Attacks of Amnesic Aphasia, Following Attacks of Jacksonian Epilepsy; Dr. Ira E. Atkinson, Dodge, Eustachian Diphtheria: Report of a Case; Dr. R. J. Chrystal, Osmond, Abscess of Front of Neck. Also papers, titles not yet given, by Dr. B. F. Crummer, Omaha; Dr. J. L. Greene, University Place; and Dr. F. L. Frink, Newman Grove. The program will be issued June 15.

F. A. LONG, Secretary.

AMERICAN MEDICAL EDITORS' ASSOCIATION.

The following officers were elected for the ensuing year: President, Hobart Amory Hare, of Philadelphia; vice president, G. H. Simmons, Lincoln, Neb.; secretary and treasurer, Judson Daland, Philadelphia. George H. Simmons was appointed chairman of the committee of arrangements for next year, and he to appoint four others. Dr. Chas. E. Sajous was asked to deliver an address at the Denver meeting on "Medical Journalism in France." It was also decided to ask one of the local lay journalists of Denver to give an address before the association. The annual banquet will be given, hereafter, on the Monday evening preceding the meeting of the American Medical Association, and not on the same night as the section banquets, as heretofore.

CEDAR COUNTY MEDICAL SOCIETY.

Pursuant to call of President Wilson, of Hartington, the Cedar County Medical Society met in special session at Laurel, Neb., June 3. The meeting was called to order at 2:30 P. M., President Wilson in the chair. The purpose of the meeting was to appoint special committees, elect new members, and select the next place of meeting. It was moved and carried that the president appoint the committees, which was modified by the president appointing the chairmen of the committees and they in turn to appoint two assistants. The committees are:

Credentials—Drs. Dorsey, Hamilton, and Dales.

Grievances—Drs. Hamilton, Dorsey, and Wilson.

Program—Drs. Dales, Wilson, and McCalm.

Entertainment—Drs. Wilson, McCalm, and Dales.

Upon invitation and motion of Dr. Dales, seconded by Dr. Dorsey, Randolph was selected as the next place for the regular meeting, which will be Tuesday, July 13.

Seven new names for membership were favorably received and the outlook for the future of

Digitized by Google

the society is promising. Impassable roads and a change in the train service caused disappointment at the last regular meeting, but with the now partially arranged program and all things considered a pleasant and profitable session, with increasing interest, is expected at the coming meeting.

J. A. DALES, Secretary.

A PROTEST AGAINST THE ANTIVIVISECTION BILL BY COLORADO PHYSICIANS.

To the Congress of the United States: The Colorado State Medical Society, through its appointed committee, respectfully petition the senate and house of representatives not to hamper the scientific investigation of disease by any such restrictive legislation as that embraced in Senator Gallinger's bill (senate bill 1063) "for the further prevention of cruelty to animals in the District of Columbia."

We believe that the action is unnecessary and harmful; that any complaints seeming to warrant it should be fully investigated before congress is asked to interfere; and even then the great good to be accomplished through animal experiment should not be so overbalanced by the opposition of humanitarians that the wonderful work now being done in our biological and pathological laboratories will be delayed or restricted.

We believe that it is through such laboratory investigations upon the bodies of inferior animals that a correct understanding of disease is already dawning upon the medical mind, and that the possibility of an artificially produced immunity in the system of an affected person is not understood or desired by those who seek this restrictive legislation; otherwise they would appreciate the fact that all infectious diseases are alone controlled either by naturally or by artificially produced antitoxins, and that these remedial means are best determined by animal experiment. They would recognize that the nearly 50 per cent. saving of life through the use of the diphtheria antitoxin could never be a fact but for the previous poisoning and experimental treatment of guinea pigs, rats, etc.

The idea that the lives and sensations of such animals are to be compared in degree with those of human beings appears to us so unreasonable, unwise, and absurd that we deem it timely to protest.

The enactment of laws to prevent the fisherman from using "live bait," the farmer from cutting an angle-worm with his hoe or plow, or the pedestrian from stepping upon an ant on the sidewalk would be as reasonable as one providing that a guinea pig must be chloroformed before it receives a hypodermic injection, perhaps similar to what thousands of human beings are now receiving, happily through the knowledge obtained by animal experiment.

Appreciating these latter day humane instincts, so advanced into power and influence by association and corporate means, nevertheless, we estimate above them all (and we wish that you, the representatives of the people, might do the same) the humane and self-sacrificing spirit of true physicians and scientists, also increasingly in evidence nowadays, who place prevention above the cure of disease.

Respectfully submitted,
THE COLORADO STATE MEDICAL SOCIETY.
By the Committee:
CHARLES DENISON, M. D.
A. STEWART LOBINGIER, M. D.
WM. J. ROTHWELL, M. D.

TWENTY-NINTH ANNUAL MEETING OF THE NEBRASKA STATE MEDICAL SOCIETY.

The twenty-ninth annual meeting of the Nebraska State Medical Society met at the Lindell Hotel, Lincoln, May 18th to 20th. The first session was called to order at 2:30 P. M. Tuesday, the 18th, Dr. F. D. Haldeman, of Ord, president, in the chair. Thirty-seven members were present at the opening of this session.

Reports were received from the committee on credentials, by Dr. Geo. H. Simmons, and from the committee on arrangements, by Dr. H. B. Lowry. Dr. Geo. H. Simmons, secretary, Dr. H. B. Lowry, corresponding secretary and librarian, and Dr. W. M. Knapp, librarian, each made an annual report. (These reports were referred to a special committee consisting of Drs. J. L. Greene, J. R. Haggard, and A. R. Mitchell, to report at the general session Wednesday evening.)

The society then listened to the presidential address by Dr. F. D. Haldeman, on Medical Experience. (See page 159.)

The secretary read the report of the committee on necrology, sent in by the chairman of the committee, Dr. A. S. v. Mansfelde, who was unavoidably absent. The report was adopted by rising vote.

REPORT OF COMMITTEE ON NECROLOGY.

MR. PRESIDENT, LADIES AND GENTLEMEN: "France, the army, Josephine." Last words of Napoleon. Your committee which is entrusted with the sacred duty of making the last record of those of our brothers who have been called hence from their earthly labors during the last twelve months took the liberty of using as a text to its report the last words of the great Corsican: "France, the army, Josephine." Words which characterize the greatness of the man better than do his deeds themselves. Paraphrased, you will readily grant, they mean, "My country, my duties, and my loved ones." Could you state in shorter sentence the ambition of every noble life. And yet such was the aim of our departed brothers.

When the call to arms resounded they marched to the field of carnage, there to shed their blood and give their life to their country. When in the silent hours of night, in the dreary heat of day, when their exhausted bodies claimed their right of repose; when at the height of the pleasures of life, with the cup of

Digitized by Google

joy at their lips, when sickness and sorrow at their own fireside needed their ministering hand the most, ever were they ready to respond to the call of suffering humanity; their strength, their ability, were ever at the service of their fellow-men. And when returned to their own hearth, mellowed by the scenes they had witnessed, by the griefs they had assuaged, by the pains they had stilled, yes, even by staying the heavy hand of death, that it might descend gently upon the afflicted, they brought sunshine to their home, happiness to wife and children, heaven to earth. And now they have laid them down to their last rest. All that life could be to them has been completed. Their lives have realized the noble aim expressed by the words of the dying Cæsar: "My country, my duties, and my loved ones." Such is the record, Mr. President, which your committee desires to have inscribed upon our minutes, as well as in our memories, of our departed brothers, Drs. Edward H. Smith, Frederick N. Dick, and George Winton Johnston. Your committee further recommends that a copy of this report be made by the secretary, signed by the president, and transmitted to the families of the departed members, with expressions of our deep sympathy in their affliction. We also have appended a short biography of each of the deceased, which we recommend to be made a part of our minutes. And finally, we move the adoption of our recommendations by a rising vote, the last and befitting tribute we can pay to our brothers.

Short biographical sketches were then given of the lives of Drs. Edward H. Smith, Frederick N. Dick, and George Winton Johnston. Biographical reports of these have already been published in the REVIEW. (See January, February, and May issues, respectively.)

The subject of whether to employ a stenographer or not was discussed, the general opinion being that thus far the results have been very unsatisfactory, and a motion made to do away with a stenographer this year finally carried.

TUESDAY, 7:30 P. M.

The society met in general session, the evening being devoted to the section on mental and nervous diseases. Papers were read by Dr. C. E. Coffin, on Catalepsy and Allied Conditions; Dr. J. M. Aikin, on a case of Amytrophic Lateral Sclerosis; Dr. H. B. Lowry, on Progressive Muscular Atrophy; and Dr. J. L. Greene, on Treatment of Melancholia. All of these papers elicited considerable discussion.

A resolution was adopted instructing the delegates of the Nebraska State Medical Society to work and vote for Denver as the next place of meeting for the American Medical Association.

A motion was made to appoint two assistant secretaries, and Drs. F. A. Long and J. L. Greene were appointed.

WEDNESDAY, MAY 19.

The society met in two divisions during the day. The medical division was presided over by the first vice president, Dr. J. Lue Sutherland, and was called to order at 9:15 A. M. The following papers were read: The Position of General Medicine as We View It, by Dr. W. S. Gibbs, of Omaha; The Doctor as an Educator, by J. Lue Sutherland, Grand Island; Irregular Forms of Pneumonia, by Dr. B. F. Crummer, Omaha; Periostitis Following Typhoid Fever, by Dr. Willson O. Bridges, Omaha; Studies in Nebraska Parasites, by Prof. H. B. Ward, State University. Division adjourned to 1:30.

Afternoon Session, Medical Division.—Meeting called to order at 2.

The following papers were read: Report of Six Cases of Typhoid Fever and a Case of Puerperal Fever in One Family at One Time, by A. P. Haynes, of Bee; Etiology and Treatment of Membranous Croup, So-Called, by Dr. H. M. McClanahan, Omaha; An Improved Stethoscope, by Dr. A. R. Mitchell, Lincoln.

The division then took up the obstetrical section. Obstetrics was the title of Dr. V. H. Coffman's paper. My Unfavorable Labor Cases in Eighteen Years' Practice, by Dr. F. A. Butler, of Harvard; Accidental Hemorrhage, a Case, by Dr. F. E. Beal, Papillion; Twenty Years of Obstetrics in a Country Practice, by Dr. W. B. Ely, Ainsworth.

The division adjourned at 6 o'clock.

The surgical division met at 10 A. M. and was presided over by Dr. O. Grothan. The following papers were read: (a) Report of a Case of Appendicitis; (b) Report of a Case of Tuberculosis of Os Calcis, by J. Theo. Miller, Holdrege; Operative Treatment of Hallex Valgus, by J. P. Lord; Surgery of Gall Ducts, by A. R. Mitchell; Some of the Essentials of Successful Surgery, by J. E. Summers, Jr., Omaha. Division adjourned.

Afternoon Session, Surgical Division.—Meeting called to order at 2 and the following papers were read: Have the Surgeons Usurped the Gynecological Field, by W. O. Henry; Cancer of the Lip, by B. B. Davis; Appendicitis, by H. P. Hamilton; Auto-Infection: Its Relation to Wound Healing, by C. C. Allison; What of the Normal Salt Solution in Surgery and Elsewhere, by O. Grothan; The Bone of Contention in Railway Surgery, by Robert McConaughy. Adjourned.

GENERAL SESSION, WEDNESDAY EVENING.

Society called to order at 8 o'clock, Dr. Haldeman, president, in the chair. The committee on credentials presented the names of several gentlemen for membership and these were duly elected. Dr. R. C. Moore, chairman of the committee on grievances, said that certain papers were in his hands in reference to two members, but no charge had been made in writing. It was ordered that the papers be turned over to the secretary, to be held until the committee on grievances for next year be appointed, and then to be turned over to them, provided the charges be made in writing. The special committee to whom was referred the recommendations of secretary and librarian and corresponding secretary made the following report:

MR. PRESIDENT: We, your committee to whom was referred the report of the secretary and the librarian

Digitized by Google

and corresponding secretary, beg leave to make the following report: We concur in the recommendation of the secretary that the proceedings be published in book form; that the general arrangement and binding of the volume be similar to that of last year. We recommend that the secretary enter into correspondence with the officials of societies of adjoining states and endeavor to arrange the meetings for next year upon different dates.

We recommend that the librarian be allowed the sum of $15 for the purpose of carrying into effect the plan suggested in his report for the preservation of our library, and urge each member who has reprints of his publications made to send a copy to the librarian.

All of which is most respectfully submitted.

J. L. GREENE, Chm.,
J. R. HAGGARD,
Committee.

Dr. Everett, chairman of the auditing committee, reported the examination of secretary's and treasurer's books and found them correct. The proposed amendment to the constitution, making Lincoln the permanent place of meeting, was then taken up After considerable discussion, Dr. von Mansfelde moved to amend the proposed amendment so as to make Lincoln the place of meeting every alternate year. Thus, amended, the original amendment was adopted.

A motion was then made and carried to meet in Omaha next year, and that the date be fixed some time after the 1st of June. The following preamble and resolutions were then adopted:

Whereas, There will be a vacancy on the State Board of Health on August 1 next; and

Whereas, The retiring member, Dr. F. D. Haldeman, has proven a very efficient and active official, giving the greatest satisfaction to the members of this society especially; and

Whereas, Dr. O. Grothan was successful, as a member of the late legislature, in securing at a critical moment the passage of the present advance in medical legislation, which is of great advantage to the cause of higher education: Therefore

Resolved, That the State Board of Health be petitioned by this society to appoint Dr. Grothan one of the board of secretaries in case that Dr. Haldeman cannot be reappointed.

A telegram was read from the meeting of the Iowa State Medical Society sending congratulations. A telegram was ordered sent in reply, and asking the Iowa State Medical Society to meet at Council Bluffs at the same time the Nebraska society meets at Omaha.

The society then proceeded to the election of officers and the following were elected: President, Willson O. Bridges, Omaha; first vice president, Robert McConaughy, York; second vice president, F. A. Long, Madison; secretary, Geo. H. Simmons, Lincoln; treasurer, Wm. M. Knapp, Lincoln; corresponding secretary and librarian, H. B. Lowry, Lincoln.

A resolution was adopted instructing the secretary to arrange the program hereafter so that gynecological and obstetrical papers shall appear in the same section.

A motion was made to the effect that the proceedings be sent to those only who are in good standing.

After installation of officers the society adjourned to the banquet. This was a very enjoyable affair. After the inner man had been satisfied and cigars passed, Dr. H. B. Lowry, acting as toastmaster, introduced Dr. A. S. v. Mansfelde to respond to the toast of "The Nebraska State Medical Society." "Medical Legislation" was responded to by Dr. O. Grothan; "The Place of Medical Education in a University Curriculum," Chancellor Geo. E. MacLean; "The Doctor the Foot-Ball of Fate," W. F. Milroy, M. D.; "The Preacher and the Doctor," W. R. Halstead, D. D.; "The Specialist," D. C. Bryant, M. D.; "The Dentist and the Physician," F. W. Hill, M. D., D. D. S.; "The Press and the Doctor," Hon. C. H. Gere; "The Western Medical Review," Geo. H. Simmons, M. D.; "The Lawyer and the Doctor," Hon. G. M. Lambertson; "'Old Doc,'" M. H. Garten, M. D.

It was nearly 3 o'clock in the morning when the banqueters separated.

THURSDAY, MAY 20.

Medical Division, Thursday Morning.—Meeting called to order at 9:30 A. M. Dr. W. O. Bridges in the chair. The section of obstetrics was continued and the following papers read: The Early Diagnosis of Pregnancy, by Dr. S. C. Beede, Surprise; Effects of La Grippe on Pregnancy, by Dr. G. H. Gilmore, Murray. The section of materia medica and therapeutics had but one representative, Dr. W. F. Milroy, who read a paper on Materia Medica and Therapeutics.

In the section of ophthalmology and therapeutics the following papers were read: The Eye in Its Relation to General Medicine, by Dr. W. L. Dayton, Lincoln; Two Cases of Acromegaly, with Unusual Eye Symptoms, by Dr. H. Gifford, of Omaha; The Importance of Early Operation in Intraocular Sarcoma, by Dr. D. C. Bryant, Omaha; Some Remarks on the Treatment of Chronic Suppuration of the Middle Ear. Dr. Garten and Dr. Loper both were present with papers, but as it was late, both volunteered to read their papers by title and have them published without being read, and the division adjourned to meet with the surgical section to listen to the address of Dr. Foote.

Surgical Division, Thursday Morning.—Division called to order at 9 o'clock. Dr. F. A. Long in the chair. The following paper was read: My Further Experience with Electrolysis in Gynecology, by Dr. Charles Rosewater, Omaha. In the section on pathology and histology, Dr. J. S. Foote, of Omaha, gave a most interesting talk on Pathology Reduced, illustrating his idea of reducing pathology to an easily understood and easily learned science, by the aid of charts. A motion was carried asking Dr. Foote to prepare his chart for publication, and also thanking him for his instructive address.

Digitized by Google

A large number of papers were ordered read by title and referred to the committee on publication, and the society adjourned at 1:30 P. M.

NOTES.

There were thirty-five papers read this year, against nineteen last year.

The meeting was the most successful the society has ever held, for the reason that there were more present, more new members joined, and more papers read than at any meeting heretofore.

Dividing the society into two divisions gives a chance for more work, to say the least. But the experience of this year has taught the necessity of having the rooms in which the two divisions are held nearer together.

THE AMERICAN MEDICAL ASSOCIATION.

The semi-centennial meeting of the American Medical Association was held in Philadelphia June 1 to 4, and was the largest meeting held by the association since its organization—fifty years ago. Addresses of welcome were delivered by Mayor Warwick, and by Charles Emory Smith, ex-minister to Russia, in place of Governor Hastings, who could not be present. Dr. Senn's presidential address was a masterful effort. His subject was "The American Medical Association: Its Past, Present, and Future." It was a eulogy of the association, showing up the magnificent work it has done in elevating the profession, in the cause of medical education, etc. He spoke of the value of medical societies as post-graduate medical educational institutions, the whole tenor of the address being to show up the value, not of the American Medical Association alone, but of all medical societies. The address as published is a long one and well worth reading, but only about half of it was read. After the address Dr. Hobart A. Hare presented Dr. Senn with a beautiful gold insignia of his office, as a token of esteem in which he is held, not by the physicians of Philadelphia only, but by the profession of the whole country. Dr. Albert I. Gihon read his report of the Rush monument fund, showing a paltry $4,112 as the sum total collected during the many years which have elapsed since such a monument was first proposed. President Senn, in his address, had referred to the subject, and this, with the appealing report of Dr. Gihon, aroused the association to the determination to take hold of the matter in earnest. Dr. Cutter started the movement with a motion for the association to give $1,000 annually till the fund was raised. This was soon put aside when the west was heard from, in the person of Dr. J. A. Graham, of Denver, Colo., who moved that the association proceed at once to raise $100,000, and guarantied Colorado for one-fiftieth of the amount, $2,000. And then Dr. William H. Humiston pledged Ohio for the same amount, and Dr. Love, of St. Louis, did the same for Missouri. And then the question was raised whether large states like New York and Pennsylvania should not be expected to do more than the small states. After considerable enthusiastic talk, it was finally decided that the American Medical Association should proceed to raise the $100,000, and that the president of each state society should be asked to appoint a special committee to co-operate with the Rush monument committee, and in this manner proceed to raise the money.

At the second day's general meeting the attraction was the visit of President McKinley, and the building was crowded. This gave Dr. Austin Flint an immense audience when he read his address in medicine on "Stercorin and Cholesteremia," an abstract of which we print in this number of the REVIEW. About 11:30 all business was suddenly stopped, and President McKinley, accompanied by Governor Hastings, Mayor Warwick, Dr. Pepper, and others of the presidential party, came in, the former being conducted to the front by Dr. Senn and introduced to the cheering assemblage. President McKinley spoke for about eight minutes, and then Governor Hastings made a very happy speech. After the retirement of the presidential party the subject which had been so suddenly dropped was taken up, viz., railroad rates to the association meeting. Considerable straight talk against the railroads was indulged in by many of the members at the slight recognition made to the association at its annual meetings. The matter was finally referred to a committee.

At the third day's (Thursday) general session, among other business, Dr. Horner, as chairman of the committee on mutual aid section, made quite a report in favor of such an organization in connection with the A. M. A., after which the following was adopted:

"Resolved, That the suggestion of Dr. F. Horner, that steps be taken to organize a relief association for disabled physicians and the widows and orphans of deceased members, be approved.

"Resolved, That a committee, consisting of a member from each of the several state medical societies, be appointed by the chair to formulate a scheme for the organization of such a beneficial association within the American Medical Association, and that this committee report in detail at the next annual meeting.

"Resolved, That the president add to the committee the names of the secretaries of state medical societies."

The following resolution was introduced and adopted:

"Whereas, Senate Bill 1063, formerly Senate Bill 1552, has been reported favorably to the United States senate; and

"Whereas, We believe that its passage would seriously interfere with the progress of practical medicine, and therefore be a public calamity: Therefore,

Digitized by Google

"Be it resolved, That the American Medical Association, with a full knowledge of the contents of Senate Bill 1063, most earnestly protest against its enactment."

Dr. W. W. Keen delivered the address on surgery, which was the finest of all the papers or addresses of the series. It was frequently applauded, and was listened to with intense interest. We hope to publish this in our next issue.

JUBILEE EXERCISES.

The jubilee exercises, commemorating the fiftieth anniversary of the founding of the American Medical Association, being in order, Dr. N. S. Davis, of Chicago, the founder of the association, appeared upon the stage, escorted by the presidents of the state medical societies and the presidents of the state boards of medical examiners.

Dr. Davis was presented to President Senn by Dr. John B. Roberts, chairman of the committee on anniversary exercises, who said:

"Some fifty-two years ago, at a meeting of the New York State Medical Society, there appeared for the first time a young delegate from Broome county. Observation during his collegiate course had opened his eyes to the fact that there were radical defects in the methods of medical education. To remedy these evils and to organize the profession of the United States into a professional brotherhood with a common purpose, a common dignity, a common ethical standard, and a common humanity, he determined to use all the vigor which he possessed. It was his desire to separate medical teaching from medical licensing, and to organize the profession in connection with a central medical body. That his labors, despite much opposition, have been crowned with success is shown by the existence of a medical examining board in nearly every state in the Union, and state medical societies in all parts of the country. The presence of these gentlemen who accompany him to-day, and the registration of 2,000 delegates and members, attest the approval given to the efforts of the ever young man whom I now present to you."

At the conclusion of Dr. Roberts' remarks Dr. Davis arose and was greeted with round after round of applause, which continued for fully three minutes. As soon as quiet was restored, President Senn said:

"Dr. Davis, in the name of the nine thousand members of the association I greet you, and congratulate you that you have been permitted to live long enough to witness the commemorative exercises of your life work, the fiftieth anniversary of your favorite child—the American Medical Association. May you live long, and when the inevitable comes find a peaceful end and an ample reward in the life to come." (Applause.)

Dr. Davis then delivered his address, selecting for his subject "A Brief History of the Origin of the American Medical Association, the Principles on Which It was Organized, the Objects It was Designed to Accomplish, and How Far They Have Been Attained During the Half Century of Its Existence."

Dr. John B. Roberts, chairman of the committee on anniversary exercises, informed the association that diligent search had shown that there were surviving only four of the original members of the association, Dr. Alfred Stillé, of Philadelphia, an ex-president of the association; Dr. John B. Johnson, of St. Louis, an ex-vice president; Dr. David F. Atwater, of Springfield, Mass., and Dr. N. S. Davis, of Chicago, an ex-president. Dr. Roberts stated that the committee regretted that Dr. Stillé was not present, and read letters to the association from Drs. Atwater and Johnson.

At the fourth day's (Friday) general session Dr. John B. Hamilton delivered the address on state medicine, taking for his subject "Prevention of Tuberculosis." After this the nominating committee made its report, and the following were elected to the various offices, as recommended by the committee:

President—Dr. George M. Sternberg, Washington, D. C.

First Vice President—Dr. Joseph M. Mathews, Louisville, Ky.

Second Vice President—Dr. J. L. Thompson, Indianapolis, Ind.

Third Vice President—Dr. J. H. Wiggin, New York, N. Y.

Fourth Vice President—Dr. T. J. Happel, Trenton, Tenn.

Treasurer—Dr. Henry P. Newman, Chicago, Ill.

Assistant Secretary—Dr. W. A. Jayne, Denver, Colo.

Librarian—Dr. George W. Webster, Chicago, Ill.

Chairman Committee of Arrangements—Dr. J. W. Graham, Denver, Colo.

Board of Trustees—Dr. J. T. Priestley, Des Moines, Ia.; Dr. Joseph Eastman, Indianapolis, Ind.; Dr. Truman W. Miller, Chicago, Ill.

Judicial Council—Dr. D. W. Crouse, Waterloo, Ia.; Dr. T. D. Crothers, Hartford, Conn.; Dr. William T. Bishop, Harrisburg, Pa.; Dr. R. C. Moore, Omaha, Neb.; Dr. G. B. Gillespie, Covington, Tenn.; Dr. C. H. Hughes, St. Louis, Mo.; Dr. Ida J. Hieberger, District of Columbia.

Annual addresses—

On General Medicine—Dr. J. H. Musser, Philadelphia, Pa.

On General Surgery—Dr. J. B. Murphy, Chicago, Ill.

On State Medicine—Dr. S. C. Busey, Washington, D. C.

Denver was chosen as the place of meeting for next year.

Dr. Bulkley read the following report of the executive committee:

"The proposal to restore the former policy of

Digitized by Google

the association in favor of offering annually to members a gold medal for meritorious scientific work, having already been approved by the association and recommitted for elaboration of details, the executive committee respectfully recommends:

"1. That the design of the medal shall contain the seal of the United States, or a seal of the association to be hereafter designed, on one side, and an Æsculapian staff on the other, together with the name of the recipient of the medal and suitable inscriptions.

"2. That the commercial value of the medal shall not exceed $50.

"3. That a standing committee on prize medals, consisting of three members of the association, shall be elected by the executive committee, as follows: One for one year, one for two years, and one for three years, and thereafter one be elected yearly, to hold office until, in either case, the successor has been duly elected. In no case shall a member of the executive committee hold a place on the committee on prize medals.

"4. That competing essays shall be typewritten or printed and shall bear no mark revealing their authorship; but instead of the name of the author there shall appear on each essay a motto, and accompanying each essay shall be a sealed envelope containing the name, address, and motto of the author, and bearing on its outer surface the motto of identification. No envelope is to be opened by the committee until a decision has been reached as to the most deserving essay, and the other essays have been returned to their respective owners. The committee shall have authority to reject and return all essays in case none have been found worthy of the association medal. Competing essays must be in the hands of the committee not later than March 1 of each year.

"5. The committee shall report to the association at the last general session of each meeting, and the medal shall be publicly awarded by the president, with suitable ceremony."

This report was adopted after making the second section to read $100, instead of $50.

The fight for place of holding the meeting next year was a lively one while it lasted. While several cities extended an invitation for the association to meet with them, only two went into the fight in earnest, viz., Denver and Columbus, Ohio. The former had an able champion in Dr. J. W. Graham, and the forces of Columbus were led by Dr. C. A. L. Reed. When the vote came to be counted it was seen that the quiet but hard work of Dr. Graham had secured the plum in the ratio of two to one. Columbus had a map, beautifully decorated with red lines running between Columbus and the important cities of the east, to show that Columbus was nearer the center of population. But the good effect that might have resulted from this lesson in geography was demolished when a representative from the Denver delegation got up and quietly said: "Denver does not need a map to let people know where it is situated." The laugh and cheering that followed showed that the point was well received. General satisfaction was evident among the members of the association, as they expect an enjoyable time in Denver. It is to be hoped that the physicians of the west will aid the profession of Denver and Colorado in making the meeting next year a successful one, in point of numbers at least. Denver will attend to making it successful otherwise.

ABDOMINAL section, with drainage, cures not a few cases of tubercular peritonitis.—Keen.

Board of Health Proceedings.

NEBRASKA STATE BOARD OF HEALTH.

MEMBERS—Dr. C. F. Stewart, Auburn, President; Dr. B. F. Crummer; Omaha, Vice President; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.

THE Nebraska State Board of Health, at its meeting held May 20, granted certificates to the following:

Ernest E. Beckett (H.), Kearney,
Hering Medical College, 1895.
Almo J. Chapman (R.), Juniata,
Omaha Medical College, 1897.
Patrick J. Waldron (R.), Omaha,
Creighton Medical College, 1897.
Willard Kingsley Clark (R.), Niobrara,
Omaha Medical College, 1897.
John I. McGirr (R.), Beatrice,
Omaha Medical College, 1897.
Jacob J. Entz (E.), Hillsboro, Kan.,
Bennett Medical College, 1886.
John J. Kiefer (R.), Genoa,
St. Louis College of Physicians and Surgeons, 1897.

The following name was omitted from report of certificates granted at meeting held May 6:

Frederick Teales (H.), Omaha,
Chicago Homeopathic Medical College, 1897.

Books and Pamphlets Received.

Sterilized Gauze in Pelvic Surgery. By Thomas H. Hawkins, A. M., M. D., Denver, Colo. Reprinted from the Medical Mirror, St. Louis, January, 1897.

The Eye as an Aid in General Diagnosis. By E. H. Linnell, M. D. Two hundred and forty-eight pages, illustrated; price, $2. Philadelphia: The Edwards & Docker Company.

The Effect of High Altitudes in Aggravating Surgical shock. By H. G. Wetherill, M. D., Denver, Colo. Reprinted from Annals of Surgery.

Syphiloderm: Papular, Erythematous, and Hereditary. Clinical lecture delivered at the medi- By James M. Blaine, M. D., Denver, Colo. Reprinted from International Clinics, vol. IV., sixth series.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL II. No. 7. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. JULY 15, 1897.

Original Articles.

MY FURTHER EXPERIENCE WITH ELECTROLYSIS IN GYNECOLOGY.*

BY CHARLES ROSEWATER, M. D.,

OMAHA, NEB.,

PROFESSOR OF OBSTETRICS, CREIGHTON MEDICAL COLLEGE.

We learn largely by the experiences of those who have gone before us, recorded in such a manner that they may be of value to others. Thus it is that the present methods of treatment, the present therapeutic measures, are the results of the observations, not of a few, but rather the sum total of observations of all nations and all generations, to which it may or may not be our privilege to add our mite, if placed in favorable circumstances for so doing.

Electricity is one of our therapeutic agents, but though its effects have been known to a certain extent even in remote antiquity, its special mode of action and usefulness have remained for modern times to develop. It has truly been said that we live in the electrical age, when the application and utilization of this wonderful power in all the various branches of industry has extended to a degree hitherto not dreamt of. And yet we are but in the infancy of its application, for its scope of usefulness is ever increasing and broadening.

However, it is not my object to treat here of the use of electricity in general, but only of the influence of the galvanic current on uterine diseases; in other words, the use of electrolysis in uterine derangements.

By electrolysis we mean that peculiar decomposing and disorganizing effect which the galvanic or constant current exerts upon the animal tissues, resulting in their molecular disintegration and absorption without ulceration or gangrene. When the galvanic current is passed through certain animal tissues alkalies are deposited at the negative pole and acids at the positive pole, resulting in the one becoming escharotic in its action, while the other (the positive) is strongly styptic. This is the effect at the different poles, but on the tissues between the poles the current has that peculiar decomposing influence which results in the gradual disintegration of tumors and their absorption without affecting the healthy tissues. This action is evinced upon the tissues of a low grade of vitality mainly, while upon healthy tissues of normal vitality the electrolytic influence is hardly effective. Thus, benign tumors, foreign growths, exudations, and the like are readily caused to disintegrate and become absorbed, while the only effect the current has upon healthy tissues is one of a tonic nature. I have not included in the above list malignant tumors, upon which I am not prepared to accede to the electrolytic current a beneficial action. In fact this is a question which has not yet been solved to the general satisfaction of the profession. I know that some have even claimed a very beneficial influence of the galvanic current upon malignant tumors, but this view is not concurred in by the vast majority of writers, who rather incline to the belief that the current exerts an evil influence upon such growths, and that whenever the malignancy of a tumor is established electrolysis is counter-indicated.

In the following record of cases and methods of treatment I am not claiming any originality for the course pursued, but have only followed in the well-trodden paths made by others, and shall feel that my labor has not been in vain if my limited experience, added to that of previous observers, shall be of value to some of you in indicating which cases are suitable for electrolytic treatment and which are not, and what is the safest and best mode of procedure in such cases.

Electrolysis is not claimed to be a panacea for all uterine and pelvic ills, as some writers would have you believe, nor is it even safe to use this method of treatment in certain cases. I also wish to emphasize the fact that this is but one therapeutic agent, and that whoever resorts to its use need not feel the slightest hesitancy about simultaneously using any other therapeutic agents called for in the special cases treated. In fact there are some therapeutic agents which, if judiciously used, will materially aid the electrolytic effect of the galvanic current. Such agents are iodine in its various combinations, used internally, moist heat in the form of vaginal douches and warm baths, proper diet, and the judicious regulation of other vital functions.

CASE I.—Married, thirty-eight years old; rather corpulent, with florid complexion; mother of two children, fourteen and twelve years old. Both labors had been hard, but recovery was prompt and uneventful. Menstrual history uneventful until February and March, 1890, when the menstrual flow was preceded by severe pelvic pain and accompanied by the expulsion of clots. Flow lasted eight days each time. Shortly after last

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

menstruation (April, 1890) patient took sick with a pelvic peritonitis, from which her recovery was slow and tedious, lasting from two to three months, leaving the uterus enlarged and extremely tender. From this time on patient has had very profuse menstruation, with leucorrhea between times, but she will not consent to a curettement. Ordinary intrauterine applications and other local treatment have not benefited her appreciably. The history of pelvic peritonitis, the continued tenderness in the periuterine region, and the obstreperous nature of the patient, who repeatedly disobeys her physician's directions, have led me to avoid trying electrolysis, though had I a more docile patient, I should have been tempted to try a mild galvanic current, having seen very beneficial results from its application in cases of old inflammatory deposits. As strikingly illustrative of this point, I shall here relate a case which I observed in the years 1888 to 1891 and reported to this society in a previous paper.

CASE II.—Married, 28 years old; came to me for treatment for an endocervicitis, with the uterus bound down in a strongly anteverted position and cervix slightly lacerated. Three years before this she had had a miscarriage, following which she was sick in bed for sixteen weeks with a pelvic inflammation. In January, 1888, I attended her in confinement with her first child. The first stage of labor was delayed considerably by irregular dilatation of the os. This, in turn, was due to old inflammatory deposits, which held the junction of the cervix and body bound down at certain points, and prevented the symmetrical dilatation of the canal, just as after an iritis, with anterior or posterior synechia, the pupil will respond slowly and irregularly to the action of atropia. During the year 1889 I treated her several times for cervical catarrh by the old method of local medicinal applications to the cervical canal. I always found the uterus firmly bound down in an anteverted position. The treatment would benefit her for a while, but then again the old trouble would return. Thus it went until January 27, 1890, when I decided to try the application of electrolysis. A mild current of forty m. a. was applied to the cervical canal for a period of four minutes. These applications were repeated every three to five days, with the exception of the menstrual period, during which time and for forty-eight hours thereafter no application was made. The last application was made March 28, 1890. On April 5 patient reported that she had missed her regular monthly period, and thought pregnancy had set in. I found the uterus now freely movable, forward and backward, as well as upward and downward, and as the cervical catarrh seemed to have ceased, the treatment was now discontinued. In the early part of May, 1890, she returned to me complaining of severe nausea and vomiting occurring every morning. I found the uterus enlarged and with a thick discharge issuing from the cervix. The cervical catarrh had returned, and I thought it worth while to try the application of electrolysis on the diseased mucous membrane of the cervical canal, in order to determine how far this was to blame for the vomiting. After two applications the vomiting was greatly ameliorated and the local condition improved. From this time treatment was discontinued and patient passed through a perfectly normal pregnancy, ending in a normal labor, with normal, regular dilatation of the os. This patient has remained in perfect health ever since that time, a period of over six years since the removal by electrolysis of the residue of an old pelvic inflammation.

CASE III.—Medium-sized, rather emaciated lady 26 years old, from central part of Nebraska, came to me in November, 1891, with the following history: Menstruation established between 16 and 17, very regular and very profuse, usually lasting a whole week, but entirely painless. One child, born three and one-half years ago; labor uneventful; no miscarriages. Present trouble dates back about two years, when, on a visit at Kansas City, she took sick with what the physicians thought was some bowel trouble, but she had remained bloated ever since. This bloating had disappeared recently (in February, 1891). Present symptoms (November, '91) are profuse menstruation, lasting eight days, great emaciation and loss of weight. Pain in abdomen, especially in both iliac and supra-pubic regions. Upon examination I find upon the right side of the uterus a small fibroid tumor about the size of a fist. I applied galvanism every fourth day, positive pole intrauterine and negative on abdomen, treatment lasting four or five minutes each time and continued for about two months, with interruption at menstrual period. By the end of this time the tumor had disappeared, the general health been restored, and the length of menstruation was reduced to three or four days. I have since seen the patient several times and find that the recovery has been permanent.

CASE IV.—Small German lady, 36 years old, the mother of twelve children, the last born in February, 1894, sent for me August 27, 1894, and gave the following history. Up to the birth of her last child her health had been normal, and even after that she felt well until in June, 1894, when she had a miscarriage, which was followed by very prolonged and copious hemorrhage, for which she had been under the care of several well-known physicians, one of whom had curetted the uterus, resulting in only temporary relief of her trouble. I found her rather emaciated and anemic from loss of blood, but with an abdomen distended by gases, and a uterus which was subinvoluted and also had on its posterior surface a little toward the left side a small pediculated fibroid. I instituted treatment by electrolysis, as in previous cases, every four or five days, with the remarkable result that after five treatments the

Digitized by Google

uterus had returned to a normal size and the fibroid had disappeared. Her general health, of course, picked up immediately upon the checking of the hemorrhages, and as evidence of her recovery I can record that in November, 1895, she was delivered of a dead child after a very tedious and complicated labor, with shoulder presentation, a midwife attending and sending for assistance only after the bag of waters had ruptured and the shoulder become impacted.

CASE V.—Married, 44 years old; no children, no miscarriages, though married over eleven years. She came to me in February, 1895, with the following history: First symptoms noticed were excessive flow at menstrual period, every twenty-eight days, lasting seven or eight days, but painless. Previously, until within three to six months, the flow had been only slight during the first four days, and then came with a gush for two days. About two years previously (May, 1893) a tumor was first noticed in left groin. In the summer of 1894 patient suffered for six weeks with pelvic neuralgia, due to the presence of this tumor. Patient looks emaciated and walks with a weak, uncertain gait. Upon local examination I find a tumor of uterus measuring four and one-half inches in depth, and making the impression of being of about the size of a small infant's head. The tumor involves the anterior wall and left lateral half of uterus, and also extends down into the cervix. Os and vagina normal. Enlargement distinctly noticeable through abdominal walls when patient stands. Loud, mitral regurgitory murmur heard distinctly upon auscultation. Had it not been for this I should have advised operative interference in this case, on account of the large size of the tumor, but felt justified, by the heart trouble, in trying to see what electrolysis would accomplish. Accordingly I applied the galvanic current every four or five days for about five minutes at a time, the strength of the current varying from 75 to 150 m. a. The tumor gradually decreased in size until in June, 1895, after less than four months' treatment, the uterus measured but three inches in depth, the patient feeling well subjectively and the excessive hemorrhages having ceased. I therefore discontinued the electrolytic treatment and have simply kept the patient under observation, expecting to reapply the electrolysis should there be any signs of growth. The use of fl. ext. ergot and tinct. nux vom., which had been resorted from the beginning of the treatment of this case, was continued, and the patient has remained in statu quo, the uterus remaining slightly enlarged, but menstruation being normal and the general health good.

CASE VI.—Married lady, 28 years old, with healthy complexion, and an enlarged abdomen, was brought to my office by Dr. S. on June 14, 1895, with the request that I make a diagnosis. Pregnancy was suspected, but some of the essential symptoms were lacking. Patient's history was as follows: March, 1884, she was delivered of a boy in normal labor, but had quite a sick spell afterward, being ill with a fever for a month or two. Through all this time, however, she nursed her child. In June, 1885, she had a two-month miscarriage, from which she recovered completely. In 1886 she had "inflammation of the bowels." She was examined at that time under anesthesia by two doctors, but they expressed no opinion and did not return. Was sick at that time three or four months. Had bloody discharge from the womb all the time, and after she went home blood passed from her bowels for several weeks. This trouble was finally checked and her general health restored. Following the above attack she had typhoid fever. Menstruation regular since then, lasting four days and being painless. Breasts enlarged since January 1, 1895, and there is slight secretion of milk. Patient has had a few vomiting spells, but only a few. Pain in limbs. Urinary examination gives negative results. Abdomen enlarged as though patient were six months pregnant, the tumor presenting a smooth, regular external surface and occupying a position more toward the left side. Uterus enlarged to correspond to abdominal enlargement. Hegar's sign absent; also no fetal parts to be felt, nor heart sounds heard. Still there was some slight discoloration of nipples, with the formation of a secondary areola, and bluish discoloration of vagina. The diagnosis was left in suspenso for nearly two months, during which time the patient was seen occasionally. At about the latter part of July, 1895, she came to my office, stating that she thought she was losing ground, and so after another careful examination I decided the case to be one of a non-pregnant enlarged uterus; in other words, a uterine tumor, probably a fibroma, so located as to be unaccompanied by the profuse hemorrhages which usually come in the wake of these tumors. I began the use of electrolysis, the negative pole intrauterine and the positive on the abdomen. The tumor gradually decreased in size, until the treatment was interrupted by an intercurrent attack of right-sided pleurisy. During the attack her general health failed and she lost strength rapidly, but by the energetic use of tonics and feeding she again regained her strength sufficient to be able to continue the electrolytic treatment on October 10, after nearly two months' cessation of this treatment. Fortunately, the tumor had remained stationary in its growth during this time, and when again attacked by the galvanic current it yielded nicely, so that by the middle of November, 1895, it had become considerably diminished (about 50 per cent.). Patient from now on discontinued the electrolytic treatment, but continued the syr. hydriodic acid (Gardner's), which I have sometimes used in these cases. I did not see her again until the 27th of January, 1896, when I was hastily summoned to her bedside. She had taken a bath with the water at 90 degrees F. and walked across

Digitized by Google

the street a few minutes after the bath. In the night she had a succession of chills, but when I called the next day I found the temperature subnormal, the pulse 160, small, thready, a drawn, pinched expression about the face, abdomen enormously distended and very tender. Patient in a condition of shock, followed by an attack of peritonitis, from which she died February 12, 1896.

This last case was one of those unfortunate ones with which the physician occasionally meets, where an apparently successful result is marred by some great indiscretion on the part of the patient. She had not been treated by electrolysis for over two months, and her death was attributable directly to the peritonitis, induced by a too cool bath and exposure thereafter.

I have selected these cases from among a number which have been under my care during the past few years, for the reason that they amply illustrate the action of the electrolytic current and some of its uses. Electrolysis has a wide range of usefulness in uterine diseases, in some of which its action is more prompt, precise, and efficient than that of any other therapeutic agent which we now possess. Thus, it has no equal in the treatment of chronic endometritis, subinvolution, and the after-effects of pelvic inflammations, where the uterus and other pelvic viscera are bound together by the plastic exudations remaining after the acute inflammatory symptoms subside. It has been used to check the development of extrauterine pregnancy, but here its field of usefulness is disputed by many, and it is not my intention to discuss this point to-day.

One of the greatest fields of usefulness of electrolysis is in the cases of benign uterine tumors, such as fibromata and myomata, many of which can be brought to almost complete absorption by electrolytic action, while a still larger number are checked in their growth. In all acute inflammatory conditions about the pelvis its use is to be shunned, as tending rather to aggravate than relieve the existing trouble.

In order to utilize the electrolytic current it is necessary to have the following apparatus: A good and sufficient galvanic battery, composed of at least twenty-five to forty cells. I have used a Barrett dry cell battery for over eight years with uniform satisfaction, it having needed recharging only twice in all that time. Connected with the battery is a current controlled as devised by Massey, enabling one to turn the current on or off and increase it gradually without shock to the patient. Added to this, there is interposed between the battery and the patient, or rather between the current controller and the patient, a galvanometer, or milliameter, which, by measuring the strength of current passing through the parts treated, enables one to regulate the strength of current according to the necessities of the case. In the case of endometritis and troubles of the mucous membrane very mild currents (10 to 30 m. a.) give the best results, while in uterine tumors, fibroids especially, much stronger currents (75 to 150 m. a.) are necessary. The electrodes used are a round block tin, felt-lined abdominal plate, and a platinum intrauterine electrode, such as were devised by F. H. Martin.

In cases where the uterine disease is accompanied by excessive hemorrhages the positive pole should be used intrauterine; also in cases where the current to be used is very strong. In other instances the choice of the pole for intrauterine use is not of great importance.

Armed with the above apparatus, handled with proper care, better results can be obtained by electrolytic treatment in suitably selected cases than by any other therapeutic measure.

THE TECHNIQUE OF VAGINAL HYSTERECTOMY.

By BYRON ROBINSON, B.S., M.D.,

CHICAGO, ILL.,

PROFESSOR IN THE CHICAGO SCHOOL OF GYNECOLOGY AND ABDOMINAL SURGERY; PROFESSOR OF GYNECOLOGY IN THE HARVEY MEDICAL COLLEGE AND THE ILLINOIS MEDICAL COLLEGE; GYNECOLOGIST TO THE WOMAN'S HOSPITAL; GYNECOLOGIST TO THE WOMAN'S CHARITY HOSPITAL, AND CONSULTANT TO THE MARY THOMPSON HOSPITAL FOR WOMEN AND CHILDREN.

The patient is prepared for three days. She is given 3 grs. of Hg. Cl. with ½ oz. Mg. $So._4$ the first day, and 2 grs. of Hg. Cl. with generally ½ oz. Mg. $So._4$ the second day of preparation. Five grains of Hg. Cl. with 1 oz. Mg. $So._4$ is generally sufficient to produce fifteen stools, with bile glistening among the last ones, showing whence they come. This method of purgation excites the gastro-intestinal glands to the maximum condition of secretion—the safest state for elimination of waste products.

Second—The urine is examined on the first and second days for albumin, sugar, and urea. Traces of albumin signify little for or against operation. Sugar is more significant, but very seldom met. Any constant or considerable quantity of sugar in the urine would contra-indicate operation. The significant and standard factor for vaginal hysterectomy is the per cent. or number of grains of urea to the ounce of urine. For several years I have had the urea tested at the various hospitals, and it varies from three to thirteen grains to the ounce. Below three or above thirteen grains of urea to the ounce I would hesitate to operate. The common findings are six grains to the ounce. Drinks, as lemonade, with a little spirits of nitre, Co., spirits of juniper, etc., materially increase the quantity of urine. But the purgation steals away much fluid and passes it off with the stools.

Third—The patient should have a daily scrub bath of salt and soap, lasting fifteen to thirty minutes, according to the patient's strength. By this natural stimulus to the gastro-intestinal mucosa, kidney, and skin we arouse the three secretory apparatus, the eliminators, the drains, to the highest function, which is the safest condition to re-

Digitized by Google

sist infection. Seventy-two hours is little time enough to prepare a patient for such an ordeal. Four days is still better. During the three days preceding the patient should be fed on liquid diet, e. g., milk, eggs, oatmeal, toast, baked apple. Avoid foods difficult to digest, as meats, beans, cheese, and uncooked fruits. Two hours before the operation introduce a high rectal enema. I start the use of strychnia sulph. at one-sixtieth of a grain hypodermically every four hours for two days previous to the operation.

She being now ready for operation and anesthetized (chloroform affects the heart; ether affects the lungs and kidneys, and selections can be made according to these defects), place her on the back and expose the cervix with Sims' specula, seize the cervix with traction forceps, pack the uterus moderately with bichloride gauze, disinfect the cervical canal with Hg. $Cl._2$ (1 to 1,000) or 25 per cent. carbolic acid, and close the mouth of the cervix tightly with strong silk ligatures, so as to prevent leakage of infectious matter in the field of operation. Omit no detail of antiseptic precaution, for life and death may hang on a single one. Now seize the closed cervix with double-pronged traction forceps and draw it gently outwards, where it may be further exposed with the blade of the vaginal specula by the two lateral assistants. With scalpel or scissors make a circular incision through the vagina at the cervico-vaginal junction (avoid the bladder by testing its position with a sound). With the index finger begin gradually but vigorously to separate the uterus from its surroundings, at the same time keeping up continual force on the traction forceps. As the finger gradually separates the bladder and rectum from the uterus and the uterus descends, two strong structures will appear on the sides of the uterus, viz., the sacro-uterine ligaments and the uterine arteries. The sacro- (rectal) uterine ligaments may be entirely severed with the scissors without fear of hemorrhage, when the uterus will descend to a surprising degree. The uterine arteries should be entirely isolated by first penetrating the peritoneum between the bladder and uterus with finger or scissors, after which the index fingers should separate well all tissues between the bladder and uterus as far out and some distance into the broad ligament, so that the ureters (the dangerous elements) may be well pushed to the sides of the uterus, i. e., forced laterally out of the grip of the ligature.

Now pass the finger behind between the rectum and uterus, penetrating the peritoneum, Douglas' pouch, and gradually separating and isolating the uterus. As the pouch of Douglas becomes open a sponge with a string on it may be passed in to prevent the intestines from prolapsing. By this time the broad ligaments will be so thin that the index finger can easily be brought from behind forward above the uterine artery. With the index finger around the uterine artery, by the aid of an aneurism needle armed with strong silk one can easily tie the isolated artery in sight. Now place on the artery a hemostatic forceps, with a good catch or lock on it, on the distal side of the ligature, and with a pair of scissors sever the artery between the hemostatic forceps and uterus. Treat the other uterine artery similarly, always forcing the index finger through the broad ligament and above the artery from behind forward. Isolate the uterine artery well, for then there will be less nerves and tissue crushed and hence less pain and sloughing. The uterus can by this time be well drawn down, whence one can enucleate the appendages by following the lines of cleavage. After sufficient enucleation and cleaving of the appendages is done, one can rotate the fundus forward or backward, and by seizing it with strong traction forceps pull it out of the vagina, or one can gradually pull the uterus down without rotation. Now carefully and gradually draw out one appendage at a time and put a ligature on the broad ligament just about the ovary and tube. Place a hemostatic forceps with reliable catch on the distal side of the ligature, severing the tissue between the forceps and the uterus with scissors. Treat the other appendage similarly, never attempting to isolate completely the ovarian artery, for we wish to utilize the broad ligament to grow into and hold up the upper end of the vagina.

The uterus and appendages are now removed; we have applied four ligatures and four hemostatic forceps. Sterilized gauze is pushed into the peritoneal cavity for drainage and the vagina is also packed and the forceps well wrapped with gauze to protect them from vaginal secretions (acid) and to prevent them from galling (necrosing) the patient's vagina. The patient is then placed in bed. She is allowed, say three hours after, to sip a teaspoonful of hot water every eight to ten minutes if she does not vomit. If she vomits keep everything out of the stomach. On the second day allow the patient one and one-half to two ounces of fluid per hour. Allow the patient, as soon as she is out of the anesthesia, to have a small pillow. Catheterize the bladder every five hours. Allow the woman to turn on her side after ten hours.

In thirty-six hours remove the hemostatic forceps, and on the fifth day remove the gauze, giving a quart douche just inside of the vulva. The gauze in the vagina will emit odor for three days, but that is only superficial decomposition. In forty-eight hours begin with Hg. Cl. one grain every two hours until three grains are taken, when a rectal enema will produce a stool. Fifteen hours after the operation gas should begin to pass, and if it does not a rectal enema, medicated or not, every three hours, will aid in expelling gas. Give one-sixtieth of a grain of strychnia sulph. every three hours after the operation for two or three days. After the vaginal gauze is removed administer a vaginal douche morning and evening. At-

Digitized by Google

tempt to pull the ligatures away after the twelfth day. Allow the patient to get out of bed after three weeks.

CONCLUSIONS.

1. The clamps or ligature is used for safety and for the purpose of allowing the broad ligament to grow and become fixed in the upper end of the vagina, so that when the broad ligaments contract they will draw the vagina upward, elongate it, which will avoid vaginal hernia.

2. No ligatures are finally left in the peritoneal cavity.

3. It is a comparatively safe surgical procedure. In the last series of one hundred consecutive vaginal hysterectomies, without selection, Dr. Lucy Waite and myself lost three cases.

4. Vaginal hysterectomy is in the interest of the patient, while abdominal hysterectomy is in the interest of the operator.

5. Vaginal hysterectomy creates little shock, slight soiling of the peritoneum, perfect drainage, and rapid recovery.

6. The technique of vaginal hysterectomy requires generally thirty minutes to complete it.

7. Vaginal hysterectomy removes the whole uterus (tubes and ovaries if thought necessary), which insures prevention against pain, hemorrhage, disease, or discharge.

8. Vaginal hysterectomy is a surgical procedure of immense value, because it cures such a vast majority of patients.

9. It is followed by far less hernia than abdominal hysterectomy. However, in our last series of one hundred cases, one vaginal hernia occurred, and two cases occurred in which the upper end of the vagina sagged some, but did not come within one inch of the vulva. The cases (about seventy-five) in which we utilized the broad ligaments to hold up the vagina so far show no symptoms of vaginal (sacro-pubic) hernia.

SURGICAL TREATMENT OF RETROFLEXIONS OF UTERUS.

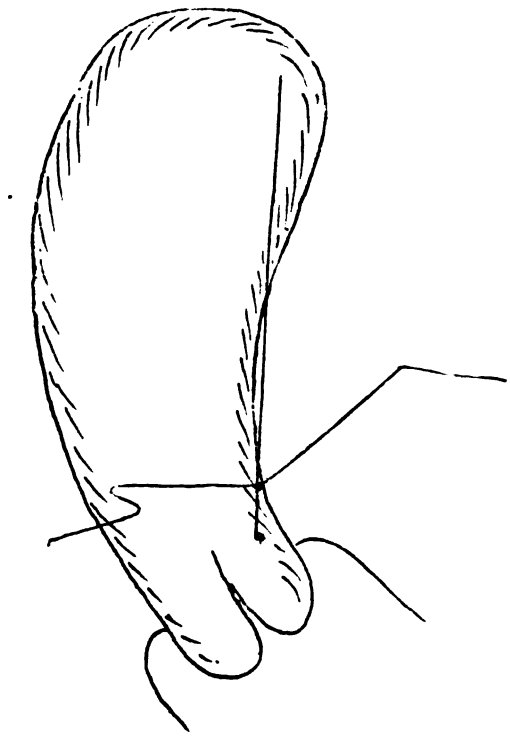
By G. W. SHIDLER, M. D.,

YORK, NEB.

After considering the many different ways of treating retroflexions of the uterus, and the unsatisfactory results obtained by the various forms of treatment, it has occurred to me that there is a way of treating this trouble not mentioned by any authorities up to the present date. The following is the plan to be adopted:

If the uterus is adherent in its retroflexed position, it is first necessary to free it from its attachments. I would say, in order to be brief, that it is understood that aseptic, and, if necessary, antiseptic precautions of the most approved order in modern abdominal and pelvic surgery are to be strictly observed. It is to be hoped that at the present day there are but few, if any, so reckless as to undertake abdominal or pelvic surgery without acquainting themselves with the most recent technique of the operation.

If it becomes necessary to make abdominal section in order to free the uterus, this operation is as easily performed, and even more so, than when the uterus is mobile and abdominal section not required. The uterus is to be freed from its attachment, if any, by abdominal section or otherwise, so that it may be put in a position with the fundus slightly anterior to that of normal. If abdominal section has been made and the uterus is freed from all attachments, the peritoneum should be incised horizontally just above where it is reflected from the bladder to the uterus, and denuding the anterior portion of the uterus as near to its vaginal attachment as possible, pass a No. 6 or 8 chromicised catgut through the anterior portion of the fundus from right to left or left to right, horizontally with the body of uterus, but not entering the cavity of the organ. The thread should cross to the opposite side of the uterus and there be made to pass back to the same side through the anterior portion of the cervix, just above the vaginal attachment. The thread is now to be tied with the one from the opposite side of the fundus. This leaves the thread passed through the cervix and fundus and crossed over the anterior portion of the body of the uterus. By drawing the thread tight before tying it the uterus can be made either straight or, what is to be preferred, slightly anteflexed, with the catgut acting in relation to the uterus as a bow-string to a bow.



Side view, with ligature in position and uterus slightly anteflexed—ligature acting in relation to uterus as a bow-string to a bow.

The incised peritoneal surfaces can now be approximated, and if catgut is used, and the operator is friendly to anterior fixation, it is an easy

Digitized by Google

matter to attach the fundus to the lower portion of abdominal wound. The catgut used is supposed to be chromicised and will last from thirty to ninety days. The abdominal incision being now closed, it remains to pack the uterus with iodoform gauze, or use some suitable uterine stem, such a one as was introduced by Dr. Gill Wiley, of New York. The vagina should now be packed with cotton, wool, or iodoform gauze, in such a way as to keep the cervix well back, thereby necessitating the fundus occupying a position which can be made slightly anterior to that of normal. This can be greatly facilitated by keeping the bladder empty for the first few days. Should the uterus be found movable, and either free from or in condition capable of being made free from all attachments, the operation can be easily performed through the vagina. After taking all necessary precaution to make the vagina and uterine cavity antiseptic, an opening should be made at the anterior junction of the vagina with the uterus. The greatest danger is that of injuring ureters and bladder, which to an experienced operator is slight. After opening the peritoneal cavity and examining uterus, tubes, and ovaries, the fundus can easily be brought down with a vulsellum and a suture passed through the anterior portion of the fundus, the same as when abdominal section has been

Anterior position of uterus with ligature in position. Needle should enter anterior portion of fundus at A, passing from A to B, and then being passed from C to D, through anterior portion of cervix, and tied with the other end at E, care being taken not to enter cavity of uterus.

made. After passing the suture through the anterior portion of the fundus and cervix and tying it the same as before described, the utero-vaginal surfaces should be carefully united. Should it be desirable to use either silk-worm gut, silver wire, or silk for suture holding uterus in anteflexed condition, it can safely be done, and by leaving the knot just above the attachment of vagina to cervix. It is an easy matter to remove it when thought necessary, under the influence of eucaine or cocaine. This operation has many features to commend it. One is the simplicity of operating through the vagina when the attachments will permit of this operation; another is that if chromicised catgut is used, it can be relied upon that the corrected position can be retained for from thirty to ninety days, and if a longer period be required other sutures may be used and removed with little difficulty, if the knot is left just above the vaginal attachment of the uterus.

I wish to comment on the results to the body of the uterus and the ligaments supporting the same. The anterior ligaments will become shortened and the posterior lengthened. The anterior and posterior walls of the uterus will undergo relative changes, and with possibly the exception of the use of the uterine stem, and with some packing of iodoform gauze for the first few weeks, I think that the accustomed use of the vagina as a toy shop for the display of uterine inventions will become a thing of the past, as far as uterine retroflexions are concerned.

In case massage is considered advisable it can be used as soon as the immediate tenderness following the operation has subsided. Outside of the operation, all of the objections of "ventral fixation," anterior "vaginal fixation," and "Alexander's operation" are overcome. This allows of perfect mobility, but no fixation. This operation will, I am quite certain, commend itself to the thoughtful gynecologist, and it is his attention that I wish to attract. Since satisfying my mind of the benefits of this operation, I have not had an opportunity to perform it, but hope some of my medical brethren will try it and report the results at an early date.

THE OPERATIVE TREATMENT OF HALLEX VALGUS.*

BY JOHN PRENTISS LORD, M. D.,
OMAHA, NEB.,
PROFESSOR OF SURGERY CREIGHTON MEDICAL COLLEGE AND SURGEON TO ST. JOSEPH'S HOSPITAL.

According to the Century Dictionary, the word "hallux" is altered from the late Latin "hallex," or rather "allex," the great toe; "valgus" meaning bowed outward; therefore, an abnormal outward deviation of the great toe.

Though there is considerable literature upon this subject, according to my knowledge little or no attention has been given the matter in any of the medical societies with which I am connected. Indeed, so little attention has been given this subject that I find that since announcing the title not a few are wholly unfamiliar with its meaning. And I think that it may not be unfair to state that even among operative surgeons of considerable practice cases are by no means numerous. That they might well be more numerous, with profit both to the subjects of this affliction and to the surgeon, is the writer's belief; and is the reason for introducing the subject for your consideration and discussion at this time.

*Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

The American Text-Book of Surgery states that "this deformity is present to a slight degree in the majority of adults, and has been observed at times even in young children; but troublesome hallux valgus is met with, as a rule, only in persons beyond middle age, and in advanced life is often associated with chronic osteoarthritis. Because of the wearing of a too narrow, too short, too pointed, or badly fitting shoe, or not seldom of a similarly faulty stocking, the great toe is crowded over upon the others and inclined at a more or less obtuse angle with the inner border of the foot. As a result, the normal relations of the bones of the metatarso-phalangeal joint are disturbed, and the pressure of the shoe causes bunion and periosteal irritation, and may even give rise to destructive inflammation of the soft parts and bone. Pain and disturbed locomotion are common in the more severe cases."

In the milder cases the conditions may be palliated by removing the cause and instituting such reforms in the foot-wear as necessary to bring about normal conditions, a so-called prescription of common sense in foot-wear usually being sufficient to arrest the progress of painful symptoms in their incipiency. Where active inflammatory symptoms have supervened, local application of any of the various cooling lotions—the use of ice, or the other extreme, the use of heat—may serve a useful purpose; and the indications are sometimes most conveniently fulfilled by resorting to the poultice. The felt bunion plaster is a source of relief from pressure of these inflamed bursæ, and serves to bridge over subacute attacks.

Some of the various mechanical appliances may serve a useful purpose towards correcting the mild cases and may be a means of averting operative interference. Shoes made with the toes turned inward, as though for feet in a condition of varus, is recommended. New foot-wear especially should be enlarged to accommodate the enlarged joint, instead of depending upon the foot to do what the last, and the shoemaker, should accomplish at the outset. Doctors seldom see cases, however, until locomotion becomes very painful or impossible; and I have known persons to suffer almost total disability at frequent periods for years before deciding that it was proper to have surgical treatment; they consoling themselves that it was only a bunion, and must needs be endured, inasmuch as it could not be cured. But a bunion is not like Banquo's ghost. It can be overcome by the art of twentieth century surgery, which, by the way, is like many other things—good unless you have too much of it. A perusal of recent literature upon this subject convinces me that there is a tendency towards too radical operative interference.

Dr. Robt. F. Weir, of New York, in an article in a recent number of the Annals of Surgery, not only recommends the usual chiseling away of the enlarged juxtaposed portions from the metatarsal and phalangeal bones, but removal of the sesamoids, division of the external ligament and external muscular attachments, and, not stopping here, he divides and transplants the tendon of the extensor proprius pollicis muscle to the periosteum and fibrous structures on the median side of the first phalanx of the great toe.

Ullmann transplants also the long and short flexors to the inner side of the joint.

While these measures will, beyond peradventure, cure the valgus, yet they must needs much impair the function of this important member. I cannot conceive that all this surgery is necessary, except, perchance, in most severe and rebellious cases. The results from personal experience with four feet, in three patients, confirms me in this belief. One of the joints was suppurating and required excision, and though there was extreme deformity, the tendons required no attention, and results, after nearly five years, are all that could be desired. In the other cases, which were extreme, partial excision, with removal of the sesamoids, restored the contour and secured painless function. Recent letters verify the permanence of the cures.

The curved incision (with convexity downwards) recommended by Dr. Weir I shall adopt, in future, as its advantages are very apparent. Complete excision of the articular ends of one or both bones, formerly much practiced, has the objection of shortening the toe and impairing function unnecessarily. Severing the head from the shaft of the metatarsal, or the phalangeal bones, is not only inefficient against a permanent cure of the valgus, but leaves the enlargement, a feature of greatest obtrusiveness in most every case. Removal of the bursal sacks should be accomplished in every case, as they are the focal points of inflammatory disturbance. When the toe does not assume the straight position readily after partial excision, division of the outer ligaments and muscle is to be recommended; when ample gauze padding between the toes suffices to hold the member in proper position. Some drainage of the wound is usually advisable, even with experienced operators, as most bad cases are in a state of inflammation, and suppuration may be provoked by sealing the wound completely. With care and prudence the operation should be successful in the hands of any amateur surgeon, and the results will justify its more frequent employment.

A MEDICAL student of Vienna, undergoing an examination in pathological anatomy, was asked to name the organs of the body in which cysts most commonly occur. He enumerated several, but failed to mention the ovary, the organ that the examiner was most anxious to have mentioned, and so he said: "Try to think of an organ which you do not possess," and the student, who was of Jewish extraction, at once replied: "Oh! the prepuce."

Digitized by Google

INFECTION FOLLOWING CHILDBIRTH, WITH REPORT OF A CASE.

BY H. S. BELL, M. D.,

KEARNEY, NEB.

This paper is not offered so much in the expectation of teaching anything new in aseptic midwifery as to attract the attention of those physicians who either are not convinced of the necessity of aseptic methods, or perchance may have conscientiously studied aseptic and antiseptic principles, but who have more or less backslidden.

While the great majority of the physicians of the civilized world believe in the germ theory of disease, there are many who yet ridicule this fact, and spare no opportunity to discredit its truth. Men both great and small have attempted to belittle the importance of this greatest achievement of the nineteenth century. It is chiefly through the influence of such distinguished opponents as Lawson Tait that the less enthusiastic disciples of Pasteur and Lister become careless in the practice of asepticism. It has been abundantly demonstrated that the germ theory is no longer a theory, but an exact science, and will not tolerate any compromise in the way of a lukewarm adherence. The laws of bacteriology are exceedingly plain, but success only follows when these simple rules are religiously observed.

The case upon which this paper is based well illustrates the trouble which is liable to follow any laxity of aseptic details in the management of labor. My practice for many years had been so entirely free from any serious infection following childbirth that I had come to regard the rigid observance of aseptic details as wholly superfluous, and had contented myself with apparent cleanliness, consisting always in carefully washing my hands with soap and hot water and cleaning my nails, and repeating this with every subsequent examination and making as few of these as possible. However, the experience gained in the following case has taught me, at least, that pyogenic microbes are not always so simply relegated.

To make the case easy of comprehension, it is necessary to know something of my environment previous to its occurrence. Ten days prior to the delivery of the case I had operated upon an old case of infectious necrosis of the os calcis, removing the bone; and at the same time I had a case of facial erysipelas, attended with many blebs, which I opened and otherwise handled the infected skin. In the meantime I attended a case of confinement, but only made the slightest examination; this case recovered without infection or any symptom of illness. April 13, 1897, ten days after dismissing my case of erysipelas and operating upon an extremity cris-crossed with sinuses and foci of suppuration and removing necrosed bone, I was called to attend Mrs. B. J. H., age 35, in her fourth confinement. About 8 P. M., without previous warning, a sudden discharge of about a pint of water occurred from the vagina. This was followed by slight pains at infrequent intervals until 2 P. M., when I was called. At 3 P. M. she took to the bed, and after carefully washing my hands through two bowls of hot water with soap and cleaning my nails I made an examination, finding the os almost completely dilated and the membranes ruptured. The vertex presented in the first position. The pains increased in force and at 5 P. M. I began the administration of chloroform during the moments of pain. At 7 P. M., after about four hours of moderately severe labor, the child was born. I placed my left hand upon the abdomen over the fundus of the uterus and made circular friction movements. I thought the uterus contracted promptly, but did not remain very firm. I continued to watch with my hand upon it for twenty minutes, when at the height of a contraction I expressed the placenta a la Crede. I continued my hand on the abdomen with a squeezing and rubbing motion several minutes, trying to promote retraction, which was not fully obtained. In removing the placenta from the bed, I noticed the membranes were greatly distended with fluid. I also observed an extraordinary quantity of clotted blood massed against the vulva and buttocks. The patient's face was as white as marble, lips ashy gray, pupils widely dilated, and she complained of great thirst. My hands were bloody and filthy, but the emergency was so great I at once grasped the uterus through the abdominal wall and found it entirely relaxed, no response occurring. After a moment I introduced my right hand into the vagina and found it and the uterus filled with clotted blood; this was removed, when I carried my fingers and palm into the cavity of the uterus, and by aid of bimanual pressure and very hot water through an unclean fountain syringe I quickly arrested the hemorrhage and secured firm and permanent contraction. Her pulse at this time was very feeble and running 160 per minute. She was made clean and dry; the abdominal binder and occlusion pad were applied. No symptoms of note, save the rapid pulse, occurred until the third night after delivery, when she had a hard chill, lasting two hours. The morning following this chill she had a temperature of 104, pulse 175. Thinking possibly it might be a case of sapremia, or putrid intoxication, I placed her crosswise the bed upon a Kelly pad, introduced a bivalve speculum, seized the anterior lip with a double tenaculum forceps, and with large phlegets of dry borated cotton and a long curved uterine dressing forceps I wiped out the uterus thoroughly, at first bringing away many small fragments of blood clot; then I saturated a piece of cotton the size of three fingers with iodized phenol (carbolic acid crystals, 1 oz.; iodine crystals, ½ oz.; glycerin, 1 oz.; mixed, with heat and constant stirring) and carried it up to the fundus and allowed it to remain a few minutes. She was ordered epsom salts every four hours until free catharcis followed. At 4 P. M.

Digitized by Google

her temperature was 104, at which time I gave an intrauterine irrigation of hot solution of one to one thousand permanganate of potash and fifteen grains of quinine per orem. At 8 P. M., temperature and pulse unchanged. Repeated the irrigation of uterus and gave fifteen grains of quinine. The following morning the temperature was 104.5, pulse too rapid to count. I again wiped out uterus with dry borated cotton, and applied the caustic solution of carbolic acid and iodine and gave fifteen grains of quinine. Bowels had acted freely. Temperature was taken every two hours and during the day ranged between 104 and 105. At this time I was fully convinced that it was a case of septicemia, and that local antiseptic treatment was of no avail, consequently no further intrauterine medication was attempted. Her treatment each day after this consisted in fifteen grains of quinine mornings, and twenty-five grains evenings, four ounces whisky, one hundred and twenty grains of protonuclein, one-fifth grain strychnia, morphia sufficient to control pain and respiration, and bowels moved daily with an enema of three pints flaxseed meal tea containing one ounce of castor oil and a half ounce of turpentine. She complained of pain in the lower abdomen; bowels throughout were greatly distended with gas. The enemas always moved bowels freely, bringing away large quantities of gas. Her diet consisted exclusively of peptonized milk, of which she took from four to six pints daily. The large evening doses of quinine would give her from four to six hours of comparatively light fever, but the temperature before morning would rise to 104 or 105. This exceedingly high temperature and rapid pulse continued with but a few hours' respite daily for ten days, at which time the temperature suddenly dropped a degree below normal and pulse fell correspondingly. Diaphoresis throughout was profuse, and especially after fever subsided. The kidneys acted freely during the pyrexia. The elimination by the renal glands was possibly promoted by the large quantities of milk and even larger quantities of water consumed.

This case, to my mind, was one of virulent streptococcus infection, resulting from pyogenic germs upon my hands, which had come from either or both the necrosis and erysipelas cases treated ten days before. The exsanguinated condition of the patient made her an easy prey to infectious cocci. The excessive hemorrhage militated against her vital power to meet and subjugate the destructive septic germs. The protecting leucocytes lost in the post-partum hemorrhage deprived her of the defensive action of this mighty army of devouring phagocytes. It was for the purpose of rapidly mobilizing an army of these that I gave fifteen grains of protonuclein every three hours, and as the invading hosts of streptococci riotously swept every rampart without pause until such time when the phagocytes could be reinforced and marshaled to defense, when, in the twinkling of an eye, the conflagration spread by the enemy ceased and he became routed and retired in abject humiliation.

This experience has taught me the necessity of always being on guard against the possibility of carrying infection to a parturient patient. Physicians are almost constantly in contact with some form of pyogenic cocci. The treatment of felons, carbuncles, and simpler phlegmons is more or less continuous, and it is taught that these germs are omnipresent; that their favorite hiding place is under and around the finger nails. Therefore the obstetrician's chief aim is the disinfection of the hands. This is the most difficult problem which aseptic surgery has had to solve. The sterilization of gauzes, pads, sutures, ligatures, and all dressings is perfectly accomplished by aid of dry or moist heat. But the only remaining weak point is that of the hands. Volumes have been written upon this subject. Confusion has too often resulted from the multiplicity of detail. If the disinfection of the hands can be reduced to a certain and simple process, there is no reason to doubt but that every practitioner will be glad to avail himself of this added security. The very best and most practical paper upon this subject appeared in the New York Medical Record of April 3, 1897, by Dr. Robert F. Weir, of the New York Hospital, and professor of surgery in the College of Physicians and Surgeons. Dr. Weir carefully reviews in this paper all the processes of hand disinfection, and recommends as the simplest and safest a preliminary scrubbing with brush, soap and hot water, aiding the cleansing under and around the nails with a pointed brush like the end of a rattan or soft wood; about a tablespoonful of ordinary chloride of lime is then poured into the open hand, and upon this is placed a large crystal of carbonate of soda, the size of the distal phalanx of the thumb. A little water is added and the chemicals are freely rubbed upon the hands and fingers. The process is exceedingly simple and does not chafe the skin, and bacteriologic cultures have proven it to be absolutely reliable. The obstetrician can easily carry in his bag a few ounces of soft soap, a small can of chloride of lime, and a wide-mouthed bottle with a few crystals of carbonate of soda, and five minutes will render his hands entirely aseptic. The prevention of infection is of vastly greater importance than its treatment. It requires practically no labor. The treatment of a serious case of infection is one of the gravest responsibilities that ever befalls a physician. A little time and labor will prevent the possibility of the crushing anxiety which clouds the mental horizon of every doctor with a case of puerperal sepsis.

THE editor of the Laryngoscope is accustomed to spray the nasal cavity with vaseline as hot as can be borne to check bleeding after a bur or saw operation.

Digitized by Google

RECENT PATHOLOGICAL RESEARCH.*

BY A. D. WILKINSON, M.D.,
LINCOLN, NEB.

The practitioner who is not content with external evidences alone, but who aims to get down to particular analytical findings, is also the one who awakens to the fact that human reason, when divorced from the correcting influence of intelligent experiments, is always pretty sure to go astray.

We doubtless are prone to carry our theories too far at times and make them explain too much, perhaps; but you know that astronomy, previous to the promulgation of Kepler's Laws and the formulation of the Newtonian hypothesis of gravitation, was in a state of chaos, and its votaries were hopelessly divided by conflicting theories. But the moment Newton promulgated his theorem a revolution began which eventually involved the whole scientific world, and astronomy was made an exact science. What the Newtonian hypothesis did for astronomy, the atomic theory has done for chemistry. It enables one in that science to practice it with a certainty of results. He knows that if he can combine hydrogen and oxygen in the proportions of two atoms of the former to one of the latter, water will be the result. The change which has come over scientific medicine can be fitly compared with the revolution of ideas relative to the other sciences. Vesalius and Paracelsus were the pioneers in the liberation of medical thought from the dogmas that had prevailed for 2,000 years. Virchow says their service in the reformation of medical science is only paralleled by that of Luther and Calvin in religion. Their work has been supplemented by new conceptions and theories down through a Galen, a Harvey, and a Malpighi, when Kircher and Linnæus, with their far-seeing mental vision, saw a spark of light emanating from the discoveries of Leeuwenhoek, then Schwann, of Berlin, sixty years ago, caused that spark to glow with more splendor by his discovery of the yeast plant. Then the genius of Pasteur began to rise above the horizon and demolished the chemical theory of fermentation and putrefaction, followed by a multitude of microscopists, who investigated this newly discovered world of plant life. The spark still being fanned into a flame was caught up by Lister, who drove from the world the barbarous darkness of ancient surgery, and the sacrifice of human life in surgical wards of hospitals and on the battlefield was stopped at once.

From this time on the conviction began to grow that bacteria were the cause of most of the diseases that plants, animals, and men suffer from. Davaine soon discovered the bacillus of anthrax. Eberth followed with the bacillus of typhoid. In fact a multitude of bacteria that caused diseases in animals were found and studied. Koch soon came forward with the bacillus of tuberculosis. Klebs and Loeffler found the bacillus of diphtheria. Koch added to the list the comma bacillus of Asiatic cholera, and lately Kitasato and Yersin have given us the bacillus of plague. You will perceive that we have been living in the age of bacteria, but, as in the chemical age, the pendulum is swinging away from us and we are about to enter a new age, and instead of the explanation being a botanical one it is to be supplemented by a zoological one, for minute microscopic animals or protozoa are the mischief makers. Small-pox, scarlet fever, whooping-cough, and our present epidemic—measles—have defied the most careful scrutiny of the bacteriologist and his methods, but there is now strong probabilities in the near future of our knowing something about them.

The last decade has been full of the work of the toxins of Brieger and the ptomains of Selmi, but it has still to be proven that there may not be some infectious diseases in which bacteria play no part, for it is remarkable that some of the diseases in which the subject of artificial immunity has been studied by Pasteur are diseases in which no bacterial parasite has yet been forthcoming.

The further development of the study which has led, through Behring and others, to the system of serum therapy has been thought to point to a return to humoral pathology; but the analogy with putrid infection shows that it is not the blood alone, but the tissues that are influenced by antitoxins. And the study of tissue juices—thyroid and pancreas—points in the same direction. We are in the midst of researches which, under new methods and aids, promise great results.

It is my province, as chairman of the section of pathology and histology, to review or rehearse some of the more important events in this great department of medical science. Briefly, for I must not presume too much on your patience: The great question as to the cause of cirrhosis of the liver still remains as one of the unsolved problems. However, it still retains its interest for the investigator and clinician alike. In Virchow's Archiv (vol. 145, part 3), Scogliosi discusses this question at great length, especially in its relation to alcohol and the acute infectious diseases. The experimenter concludes that alcohol, or similar irritating drinks, may produce a cirrhosis when the liver is weak congenitally, but that infection is the real cause of cirrhosis. The results of his experiments are tabulated as follows: First, alcohol influences the normal liver scarcely at all; second, the lower animals react variously to different infectious agents, but in rabbits especially, cirrhosis and incipient interstitial hepatitis can be caused thereby; lastly, if the process has not advanced far the lesion may heal.

II. A very excellent paper, by Von Leyden and Schandium, seems to throw some light upon the much discussed question, the etiology of carcinoma. These investigators describe two instances of the occurrence of amebæ in ascitic fluid. The amebæ were large, pale, round or polymorphous

* Read by title at the Nebraska State Medical Society, Lincoln, May 20, 1897.

Digitized by Google

cells, larger than leucocytes and filled with pigment and fat drops. Both patients suffered from diffuse peritoneal carcinosis. Although highly suggestive of the possibility of these being parasites and bearing a causal relation to carcinoma, the authors withhold for the present positive judgment.

III. It is interesting to know to what extent tubercle bacilli can invade the alimentary tract and yet not produce any lesions. R. B. Shaw reports a case in the Montreal Medical Journal for January of the present year in which a tubercular patient suffered from diarrhea for over six months. The stools consisted largely of a flaky material, and in this the tubercle bacilli were found in moderate numbers. The clinical signs and symptoms showed little beyond emaciation, local evidences of tubercular pulmonary infiltration, and nephritis. Bacilli were found in the sputum. At the autopsy the bacilli were found in the intestines and in the feces, but there were found no tubercular lesions. There were pigmented scars in the ileum, suggestive of healed typhoid ulcers, but no evidence of tubercular lesion.

IV. The diseases of the pancreas are usually obscure, and also not very common. They are at times very troublesome when they do occur, and for this reason any point that aids to their detection is very welcome. Dr. A. McPhedian, of Toronto, describes a case of hemorrhagic pancreatitis in a boy of nine months. This seems to be the youngest case yet reported. The disease usually is found in adult life, about forty-five years of age. The present case had been troubled with colic since the third month. The bowels always required something to excite them to act. The feces were soft and yellow. In the ninth month the stools became more liquid and contained a great many small, yellow, fatty-looking particles. The patient suddenly developed symptoms which resembled intussusception and was operated upon. Nothing was found at the operation to explain the trouble. An accessory lobe of the liver was the supposed intussusception. The child died the following day. The necropsy revealed a hemorrhagic pancreatitis. The middle third of the pancreas and its immediate surroundings were deeply infiltrated with blood. The head and tail showed no changes.

V. Sadelmon, of Berlin, a fine clinician, saw a case with the following history: An acute affection; severe abdominal pain, followed by coma, closely resembling diabetic coma, namely, obtunded sensorium and unusually forced, deep, and rapid respiration—cyanotic. Urine showed albumin, casts, and 5 per cent. of sugar. The case suggested some acute infection, there being high temperature and no local findings. He diagnosed it acute diabetes and placed it in immediate causal relation with the pancreatic disease. Dr. Benda demonstrated the pancreatic specimen, showing that the organ was altered through its entire extent, forming a large tumor. In its center was a large hemorrhagic infarct, with multiple infarcts scattered here and there throughout the organ. Only a small portion of the pancreatic tissue remained normal. The parietal peritoneum and the mediastinum showed a large focus of fatty necrosis.

Touching the much mooted question of hereditary tuberculosis. Bolognesi, of Paris, examined the placenta from thirteen tubercular women and in many instances the organs of the fetus for the tubercle bacilli. One hundred and nineteen guinea pigs and eleven rabbits were inoculated. Of these two guinea pigs, inoculated with a placenta from one case, died. From these results he concluded that the inheritance of tuberculosis from the side of the mother is usually a disposition, while the direct transfer of the bacilli occurs but rarely. This latter may take place (1) if there be miliary tuberculosis of the mother, with the bacilli in the blood; (2) if there be placental tuberculosis which has produced such lesions that the passage of the bacilli is no more prevented; (3) if there be uterine tuberculosis, which favors the occurrence of placental tuberculosis; (4) if the amniotic fluid contain bacilli and be swallowed by the fetus.

The troublesome task of absolutely finding the cause of whooping-cough is still not settled. Deichler has observed the protozoa of whooping-cough, but has not been confirmed by others. Others attribute the disease to the presence of a bacillus described by Affonasiew.

Prof. M. Kurloff, Tomsk, Siberia, announces his researches with sputum from patients affected with lung trouble, and finds a characteristic difference in the sputum of children that are affected with whooping-cough.

Weispecker reports, in Zeitschr. für Klin. Med., Bd. 30, his results obtained from blood serum in convalescent cases of measles. He states that he used it on four children with measles complicated with pneumonia, at the age of nine months to five years, and one-half with good results.

Drs. Camera, Pestona, and Bettencourt, of the Lisbon Bacteriological Institute, have a very interesting article in the Centralblatt für Bak., etc., in which they were able on post-mortem examination to demonstrate the presence of the leper bacillus of Hansen in the medulla of a myelitis. The authors claim in their paper that the assertion of Zambaco Pasha in 1893 will have to be studied more carefully before it can be verified, and that it was not a variation from leprosy.

Drs. J. W. W. Stevens and B. F. Wood, in the Smith Laboratory, London, have discovered a vibrio in the sputum of diphtheritic patients and have succeeded in cultivating the same in plate culture of agar agar; also in serum agar and gelatin. It was also grown in potato and pepton bouillon. It grows more luxuriantly on agar agar. The existence of tonsillar vibrio is not a new feat-

Digitized by Google

ure, but it is worthy of note that this is the first time the pure culture has been obtained.

There is no disease that is more interesting to the general practitioner than that of typhoid fever, and since the great Widal wave has appeared it has exercised an entirely new phase in the practical application of bacteriological work in the study of infectious diseases. It will not be necessary to report the work of the investigators, Gruber, Pfeiffer, and Kole, but refer briefly to that of Widal, who made the first practical application of this method for the diagnosis of typhoid fever. His description of the phenomenon is as follows: "Several bouillon tubes are separately inoculated with the typhoid bacillus and the bacillus coli communis. A few drops of the serum of an animal thoroughly immunized against typhoid infection are added to each of these and they are then placed in an incubator at 37 degrees C. In four or five hours the tubes containing the bacillus coli communis begin to become cloudy, while the tubes inoculated with the typhoid bacillus remain almost entirely clear. At the end of twenty-four hours the tubes with the bacillus coli have become intensely cloudy throughout, while those containing the typhoid bacillus remain clear or are but slightly cloudy, the microbes in these tubes having been precipitated as whitish flakes to the bottom. A drop of the culture of the bacillus coli, examined microscopically, shows isolated bacteria, for the most part actively mobile. A drop of the culture of the typhoid bacillus, on the other hand, when examined microscopically presents only scattered agglomerations of bacteria, which are immobile, deformed, thickened, and agglutinated together. No isolated or mobile bacteria are to be seen. The formation of a precipitate visible to the naked eye, and microscopically the agglutination and deformity of the microbes are the characteristics of the phenomenon. He has examined the serum obtained from some six typhoid fever patients on the seventh, twelfth, fifteenth, sixteenth, nineteenth, and twenty-first days of the disease, to determine whether it could be employed for the clinical diagnosis of typhoid fever. Each time he readily obtained undoubted evidences that the serum exerted an immobilizing and agglutinating action on the bacilli in cultures of the typhoid organism. His simplest method of observing this phenomenon is by withdrawing several drops of blood from the end of the finger, under aseptic precautions, and after the blood has clotted the serum is separated and added, drop by drop, to a broth culture, in the proportion of one to ten. If the serum has been obtained from a case of typhoid fever a characteristic reaction will be immediately observed. If the blood serum of a person in good health, or one suffering from some disease other than typhoid, few or none of the observances referred to will appear.

Fraenkel, writing later, says that the Widal-Pfeiffer test has proven the independence of the bacillus typhosus, in addition to giving clinicians one of the most valuable methods of differential diagnosis.

The Eberth-Gaffky bacillus of typhoid fever, which has been long denied specific characteristics by many eminent bacteriologists, must now be classed among the specific bacteria, since bacilli typhosi grown upon artificial media are disturbed or destroyed only by serum drawn from typhoid patients, and conversely the serum of typhoid fever patients operates only upon the typhoid bacilli.

The identification of the typhoid bacillus outside of the human body is met with many difficulties. It is usually done by the combined or conjoined methods of Elsner and reaction method of Widal.

Loesener has made a most painstaking study of the literature on this subject, and from his research of 689 articles concludes with the following ten characters, distinctive of typhoid bacillus:

1. The appearance of the superficial colonies in gelatin plates.
2. The very active mobility.
3. The large number of flagella originating from all parts of the bacilli.
4. Decoloration by Gram's method.
5. Growth in media, containing grape milk and cane sugar, with gas formation.
6. Growth in milk without causing its coagulation.
7. Growth in proteid, containing media without generation of indol.
8. Production of acid when grown in whey, but not in excess of 3 per cent. as tested by one-tenth normal soda solution.
9. The growth on potato. This should be identical with that of a known culture of the typhoid bacillus planted simultaneously in parallel streak upon the same potato.
10. The failure to grow in Maassen's normal solution with glycerin.

You must have more than one of these characters. When all are present the conclusion is very strong.

I might mention, before leaving this subject, that Kühneau adds a case to the few instances of genuine meningitis typhosa. During the course of the fever there were some meningeal symptoms. The autopsy revealed a thick, widely spread leptomeningitis over the convexity of the brain, with flocculent serum at the base. Pure cultures were obtained, contradicting the statement of Baumgarten that suppurative processes in typhoid are always due to mixed infection.

I will conclude my report by referring to the recent outbreak of the plague in India, because of the universal attention directed to the various manifestations of the disease. Dr. W. Kolle, assistant to Dr. Koch in the Institute for Infectious Diseases in Berlin, gives a very excellent article in the Deutsche Med. Woch. He claims that the bac-

Digitized by Google

teria are peculiar and unlike any which appears in the human tissue or diseased conditions of the same, especially among the pathogenic bacteria. He places them in the same class with chicken cholera bacillus, yet the plague bacillus is somewhat shorter. He says it is not difficult to diagnose bubonic plague, because it is often found from a single dried cover preparation from a swollen or suppurating gland. In grave cases the diagnosis can be made with assurance from blood preparation, since the bacilli occur in great numbers in such cases. Kitasato has demonstrated the bacilli from a drop of blood taken from the finger tip of a plague-stricken man.

The streptococci complicate the microscopical examination of the plague bacilli, but since they are not found in many of the typical cases, they are not essential to the etiology of the plague. But, as has been shown in diphtheria, tuberculosis, scarlet fever, typhoid, and other diseases, they play the part of secondary infecting bacteria. The plague bacilli, stained with analine dyes, are decolorized by Gram's fluid, while the streptococci remain unaffected. If it be not possible to make the diagnosis by microscopic picture, then resort to the culture method.

The transmission of the plague to man, according to Yersin and Kitasato, based upon observations made in Hong Kong, occurs chiefly through peripheral infection, and not from the inoculated animal, as some would think. Yersin also announces that another additional source of infection is the dirt and dust in dwellings, through inhalation, and from vermin, bed-bugs, or fleas that crawl from plague-sick men or animals. Yersin has come nearer the solution of plague immunity by his animal experimentation than any of the investigators. He has treated twenty-six plague-stricken patients, with two deaths. If these figures are correct, then we have indeed in the serum of the plague-immunized horse a "specific plague curative serum." (Yersin's cases, however, were not diagnosed bacteriologically.)

Hoffkin has given injections similar to those used for cholera, for protection, with good results. He proposes to undertake a series of investigations upon animals for the critical examination of the possibility of active immunization, and hopes to obtain results that cannot be overthrown. Man responds to the subcutaneous injection very well, and he has undertaken the investigation in two men, with their consent, the result of which cannot be given at this time.

BROMOFORM MIXTURE.—The following will be found an excellent formula for bromoform:

℞ Bromoform, ... gtts. xl.
Mucilage of gum arabic,
Syrup of tolu, . . aa q. s. ad. ℥ ij.

M. Sig.—Shake before using. Dose, one teaspoonful.

THE NEWER MICROSCOPY.

By B. F. WEST, M. D.,
OSCEOLA, IOWA.

The progress of surgery during the past decade has been, probably, the most remarkable phenomenon of the would-be science of medicine. The first force which set in motion the real possibility of this now well-known and well-written record of progress and triumph was anesthesia. The second force, and one that added much to the impetus already gained, was microscopy. Though not of necessity, nor probably in any way related, nor in any sense dependent upon the discovery of anesthesia, it has done more than any other agent by its revelation of the physiological, pathological, and etiological relations of the human system and disease, to lead to the prevention of those untoward and frequently fatal results so often attendant upon surgical processes and surgical operations in the past. But the revelations of the microscope are more directly connected with the force which followed it. And, indeed, the details of the revelations and observations upon the cells and organisms, in their normal and abnormal conditions, and their relations and phenomena, were the facts first made known by microscopy. They were the things absolutely essential to the establishment of the longed-for logical certainty, and the positively scientific measures and conditions, embraced under the heads of antisepsis and asepsis. Animal histology, and pathology, stand together as the foundation stones upon which rests the proper and scientific study and elucidation of diseased processes in the human organism. They embrace practically all of the earlier histologic and scientific work of the microscopist in the field of allied medicine. Bacteriology followed histology and pathology, as the next step in advancing and progressive medicine and surgery. It has given a larger and more scientific view of the etiology of disease, and a new direction to therapeutic research and its practical application in treatment. Animal histology, pathology, and bacteriology, made possible by the investigations of the microscopist, have the larger share in the work which has placed surgery in the forefront of general progressive humane medicine as it stands to-day. And this despite the fact of the more recent and, perhaps, more vital effect of antisepsis and asepsis. These being, as we now know, more or less dependent upon microscopy, in order to take their place as scientific processes in surgery and medicine. I do not desire to in the least detract from the high estimation in which Lord Lister is held, nor to depreciate the value of his gift to surgery and to humanity. But I believe that without the microscope, his work, however valuable it might have proved, stood as empiricism, though of the highest type. Asepsis is the most remarkable milestone in the progress of medicine, but it is not a foundation stone in

Digitized by Google

our art, in either medicine or surgery. It is the practical application in medicine and surgery of that which was first an observation, then an experience, and then a theory, and known as antisepsis. And later, it became the stem upon which grew the fruit of the genuine evolution of a principle previously illy defined and not well understood—and empirical antisepsis broke through its shell and came forth as scientific asepsis under the influence of bacteriology. It was and is the exception to the general rule in building in the physical world,—the partial erection of a superstructure before the foundation was laid in the knowledge of phenomena and fact. But is not that which is the exception in logical building become the rule of progress in the erection of the structure called scientific medicine? Empiricism has ever preceded science in medicine, but, fortunately, has not proved to be a blind leader which has landed us in the ditch every time we have followed her. So large strides has surgery made in later years, that medicine has all but seemed so wholly eclipsed and entirely distanced, that she hardly dared to hope to ever stand again side by side with her sister, surgery. But the microscope, with some aid from chemistry, is carrying medicine toward the goal with a speed possibly more rapid than that formerly shown by surgery. And empiricism seems to be giving place to scientific medicine. The rapidity of the progress is impeded by two causes. First, by the naturally slow advancement of any science, due to the difficulties surrounding any scientific research by the plodding human mind, and its misinterpretation of facts. Another hindrance to progress is due to the difficulties thrown in the way, or perhaps it were better to say, the loss of aid which should be rendered in the application of the facts made known, and the principles evolved, by the practitioner who uses the secret, patent, or proprietary medicines or processes, whose properties he in nowise understands, or cares to understand so long as it brings success in gathering dollars. This arrant ignoramus—yes, I would say "quack"—exists too largely in the profession, and bears, not infrequently, the credentials of a good medical college and of honorable medical societies. The profession ought to stand as a unit in its desire and endeavor to bring medicine and surgery to the stature of a science. It ought not to allow itself to be trained or educated in practical therapeutics, or in surgical procedures, or be inveigled into the use of unknown formulæ by the manufacturing chemist or pharmaceutical firms of to-day. It is destructive to mental power and to the science of medicine. We need the pharmacist and the chemist, but we do not need them as educators in practical therapeutics. Histology, the study of the normal tissue, pathology, the study of the condition of the tissues after or during the time the abnormal process has affected the tissues, and bacteriology, showing the present etiology, are the tripod which we may call the older microscopy, and which support the newer or later microscopy, or what may be called chemico-vital histology and pathology. Thus microscopy, beginning with the study of the dead normal cell, and passing thence to the study of the dead abnormal cell and tissue, and to the living, active cause of disease, is now passing to the higher, newer investigation of living cells, both normal and pathological. Microscopy has also entered the field of diagnosis, and has rendered large aid to therapeutics and the treatment of disease. This study of living cells and tissues began, as one might expect, with the blood in its vital, chemical, and histological characters and properties. It is not my purpose to set forth the technique of the preparation and examination of the tissues or fluids which have been investigated, but to call attention to some of the work accomplished under this later microscopy, and to some conclusions drawn therefrom. Perhaps this can best be accomplished by bringing briefly before you two examples of work done. One is what may be called a chemico-vital process, the Widal test for typhoid fever. The other may be called a histologico-vital process, also seen under the microscope, and first suggested for early diagnosis of tuberculosis. While formerly the tissue cell occupied the chief place for study, of later date the blood has come to occupy the field of microscopic research. And while for the time being we put aside the more solid tissues and their component cells, we must not forget the very intimate and exceedingly complex relation which tissue cell, blood cell, and blood bear to each other. The cell in tissue is the place where nearly all of the pathological processes occur. And, however great the changes which take place in the blood, these changes are the direct and final result of vital processes going forward in the cellular tissues. Thus cellular histology and pathology are inseparably connected with the histology and pathology of the blood. This general fact has been recognized for years by the physiologist and pathologist, but it has been only in the most recent months that the positive and scientific details of these relations have been brought to the notice of the student. The Widal test in typhoid fever is based upon the changes, probably chemical, which occur in the blood and tissues of patients who have, or have had, this disease. These changes being observed by the aid of the microscope during the life of the patient, and not after his death, as in the case of the observations upon the pathological lesions occurring in the intestinal tract. A study of blood, in both the human and the animal, has shown that blood has, in both normal and pathological conditions, substances which act to protect the organism against pathogenic bacteria and their products. Indeed, some of these substances are so decidedly antagonistic to germ life that they inhibit, or destroy, the disease-producing micro-organism. It has also been proven

Digitized by Google

that the blood holds substances which may be natural or acquired, and are directly and powerfully antagonistic to the substances or toxins produced by the bacteria. Thus nature has provided herself protection, not only against the microbe itself, but against the noxious substances produced by it. Hence, according to this resisting, protecting power, thus displayed against bacteria and their products in the body, is immunity to disease found to exist. This state, we now know, may be naturally or artificially acquired. These alexins and antitoxins, as they are termed, are not identical, as that which is destructive to one germ or its poisonous product, may be an excellent culture medium for another form of bacteria. Again, it has been found that if the serum of a person possessing immunity against one disease, as typhoid fever or cholera, for instance, be injected into the peritoneal cavity of an animal, and the peritoneal fluid be afterward examined, the bacilli thus injected are found to be degenerating and are finally destroyed. In the case of the typhoid bacilli, it was found to produce a characteristic "clumping" or "agglutination." A later name given to this substance is lysogen. Thus it has been demonstrated that there are specific alexins, specific antitoxins, specific lysogens, and specific agglutinins. These having been determined and elaborated by a series of investigations instituted for that purpose. It is the application of the principle of specific "agglutinins," acting upon specific micro-organisms, that led to the serum test for typhoid fever, and first shown by Widal, last year, and demonstrated specifically only under the microscope. I omit details of these processes, which may be found in recent numbers of our best medical journals.

This procedure may thus be used for diagnostic purposes, reaction being found, in some instances, as early as the fourth day. Not so early in every case, but since it is found thus early in some, there is a large hope that further study of these chemico-histological and pathological conditions may give us a definite and positive test, not only for typhoid fever, but for many other diseases in which an early diagnosis is so difficult and uncertain. The microscopic technique may require changing somewhat, but these facts, promises, and hopes of a diagnosis of many important diseases at a much earlier period in their progress than now seems possible, with our present knowledge, undoubtedly depends upon the microscope, with the aid of chemistry. Symptomatology seems unable to render further aid in diagnosis, but microscopy has yet a wide field before it, largely unexplored, but full of promise. This serum test for enteric fever has made it possible to diagnose with certainty the existence of infection by the fourth day, instead of in the second or third week, as formerly. There is yet demanded another advance in both diagnosis and treatment. It seems demonstrated that the germ which we now call the typhoid bacillus is the specific cause of the disease. That the nidus of this bacillus, in the human body, is in the intestinal tract. That the primary focus of infection is also in the intestine. The thing now needed is that a positive diagnosis be made within a few hours after the onset of the disease, and before infection of the solid viscera has taken place, and these have become foci of infection for the bacilli and their toxins. This I believe that microscopical and chemical investigation will accomplish. Then our students of therapeutics and chemistry may give us a bacteriological process by which the principal and primary focus of infection may be rendered practically aseptic. Thus, the disease being absolutely aborted, the subsequent part of the treatment will be very simple and short, and medicine will then have at least another scientific procedure to look upon for her inspiration and encouragement.

The work done upon diagnosis and treatment of tuberculosis is also upon living cells and vital fluid, the blood, and is, I think, a truly scientific process. It is based upon the belief that the blood is in direct and most intimate relation to the various tissues of the body, and to the cells of which they are composed. Furnishing the supply of material for their nutrition and growth and receiving their waste. That the leucocytes are an index of the condition of the cells of the general tissues. That the various cells of the body find a counterpart in the white cells of the blood, each manifesting the characteristics of structural units, of living organisms, as, metabolism, growth, reproduction, irritability, and motion. Also that they give certain and distinctive reactions to certain and definite stains and chemicals. These properties of the cells of the tissues, being modified only by the specialization which they undergo in order to the performance of their characteristic and special functions. Every general disease, and especially degenerative diseases, such as tuberculosis, has a beginning, invisible at first, but which is followed at a longer or shorter period from its inception by sensible manifestations of its presence. Though this invisible stage is called the "latent period," this theory sets forth that there is no "latent period," but that it is all active, from the time of the reception of the specific cause and the beginning of its development, to the end of its operations. This so-called invisible or "latent period" is plainly manifest in the physiological and chemical changes and the reactions which take place in the leucocytes of the blood before the ordinary manifestations of the disease are observed, these changes being plainly visible under the microscope. In the words of one writer, "The larger organism finds a true prototype in the leucocytes of its own blood." The tissues of the larger organism are constructed of and replenished by leucocytes, which undergo differentiation. Therefore, if it be possible to determine the condition of the leucocytes before they undergo differentiation into the cells of the various tissues, it will show the predis-

Digitized by Google

position of the larger animal organism before the condition actually exists, or at least before it can be recognized by its regular signs or symptoms. If it can be demonstrated that these conditions and appearances of the leucocytes actually and uniformly exist, and that they precede and bear a specific relation to the tissue cells of the organism, then it is plain that these conditions and appearances of the leucocytes are distinctive signs of the conditions then developing in the general system, and will serve as positive diagnostic signs. Familiarity with and definite knowledge of the physiological chemistry must be had, and also a definite knowledge of the pathological chemistry and abnormal appearances uniformly existing in the cells during the so-called latent or invisible period. These conditions may be readily demonstrated, by reason of the fact that in certain stages of their existence the normal cells are affected in a certain and definite manner by well-known stains. But when it is found that these same cells are affected in a modified or different manner by the same stains, applied in the same way, with the same details and technique, it is fair to conclude that changes have taken place in the cell which have resulted in a pathological condition and the perversion of nutrition. Without entering into details of the microscopic technique, or of observations, suffice it to say that in both the young cells and in the mature cells of the blood definite conditions have been shown to exist in the normal state. While definite changes have also been proven to exist in the diseased and degenerating cells of the invisible stage of tuberculosis which show all stages to be active, and upon which a diagnosis may be based, and that early enough to make treatment effective.

What is true of typhoid fever and tuberculosis is true of many other diseases. The present lauded treatment of tuberculosis, diphtheria, cretinism, and some forms of insanity, and many other diseases, have their origin in the work of the microscopist. The tuberculins, the antitoxins, the nucleins, and all the forms of serum-therapy are indebted for their existence to the microscope. While there is at present much of the "fad" and some of the "fake" about the use of the serums and nucleins in therapeutics, it cannot be denied that much good has come from them, both in the stimulus given to careful study of the cell and of physiological chemistry, and in the treatment of certain diseases as being more effective than any other now known. I have mentioned this form of treatment only to bring to mind the fact that every branch of medicine, and almost every line of investigation in medicine proper, has derived a very great benefit from the revelations of the microscope, and that the present standing of surgery and medicine are due to and based upon the later work of the student in microscopy. These may seem like large claims, but there is, I think, a suggestion of greater things to come. The macroscopic naturally precedes the microscopic; at least it has been so in the past. Is there not a possibility that in the near future the adjustment of the electric light or ray and the mechanical parts of the microscope, will be developed to such a degree in their relations that skiagraphy will stand in the relation of the macroscopic to a new microscopic, and we be able to study physiology, pathology, and physiological chemistry without disturbing the existing relations of the parts under investigations? However this may be, it seems to me to be plain that medicine is indebted to the "newer or later microscopy" for that which is truly scientific in her rather limited store of scientific knowledge of the present day. And that her future acquisitions and developments, and her attainment to the position of a true science, also depend upon the same source—for she has to do primarily and essentially with microscopic organisms, the cells. This being true, the progressive, up-to-date physician of the future, who succeeds in his business or contributes to the progress and development of medicine as a science, must be well versed in microscopic technique. Knowledge of the microscope, and of histology, pathology, and cell chemistry, will become essential to the proper determination of the true etiology, the correct diagnosis, and the right treatment of disease.

ANEMIA may hinder the return of the uterus to its normal size after labor. The following is useful in such cases:

℞ Tr. gentian. comp.,
Tr. cinchonæ comp.,
Tr. cardamom comp., . . aa f℥ jss.
M. Sig.—ʒij before meals.

—Davis.

AVULSION OF THE UTERUS.

The Lancet of June 5 contains a report of a case by Hickson Smith that is interesting in showing what can be done and yet have a patient live. A woman was attended by a midwife, the child being born while the patient was on her hands and knees. After separating the child and putting the woman to bed, the midwife observed that there was a large lump protruding from the vagina. This she thought was the head of a second child, and she proceeded to pull on it for three-quarters of an hour, till it came away. The doctor reporting the case saw the patient two hours after delivery, and found her suffering from shock, and on making examination found his fingers among the intestines. No uterus or cervix could be felt. When he examined the lump which the midwife had pulled away he found that it was the whole uterus, with the peritoneal coat, and there was one fallopian tube attached to it, without the corresponding ovary. And the patient made an uninterrupted recovery. There are many cases scattered through medical history similar to the above, and, strange to say, a large number recovered.

Digitized by Google

Selected Article.

A NEW CONTRIVANCE FOR INTESTINAL ANASTOMOSIS.

Many buttons and bobbins have lately been made for effecting anastomosis; but to most minds they all have many serious faults. Murphy's button is not absorbable, causes sloughing too close to the line of union, and, if in position in the intestine and locked, cannot be readjusted if the surgeon is not satisfied with the grip of the gut.

All the bone bobbins, although many of them render good service, are, at most, only supports, and union has to be effected by stitching. Many

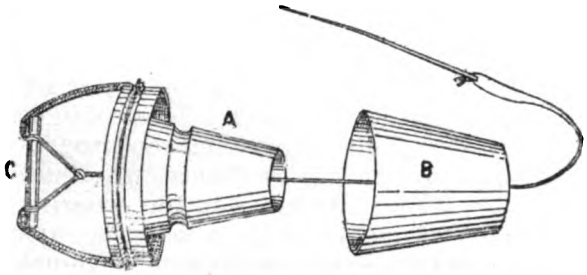


FIG. 1.—A, a button with conical hollow stem and wide undercut flange; on the flange a groove, and another on the stem.
B, a hollow cone, made to fit loosely over stem of A, and of such length that as it sits in the undercut of the flange its apex projects slightly beyond the apex of A.
C, two short bands of ordinary thread-covered elastic (as used in children's hats), joined in middle by a short thin ivory bar. The free ends of elastic are tied on either side into the groove on the flange of A. A silk thread (No 12) is fastened to the bar after the manner of a trapeze, and then passed through both cones and threaded on a needle.

of them, also, leave a bulky mass of intestine inverted at the line of union.

I wish in this notice to describe a contrivance which I have lately made, and which I think possesses many of the advantages of both Murphy's button and the bone bobbins, without many of their disadvantages. It consists of three parts, A, B, and C.

All parts are made of decalcified ivory, except the locking part, C. To lock (Fig. 2), superimpose

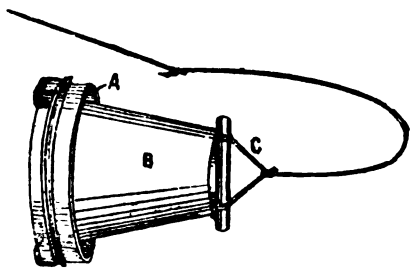


FIG. 2.

the cones, push the ivory bar of C into the lumen of A, pull the silk thread until the bar is pulled out at the apex. Now, on account of the trapeze and the even counterpull of the elastic bands, the bar rights itself, and, when the thread is slackened, rests securely across the apex of B, thus pushing the base of B firmly into the flange of A.

To introduce (Fig. 3), first run a purse string suture loosely around either cut end of the intestine. Then pass the needle of C from within out about two and one-half inches from the cut end of the lower intestine. Next let the cone B slip into the same intestine and leave it for the time. Tie the lower intestine by means of a purse string suture into the groove on the stem of A, and then

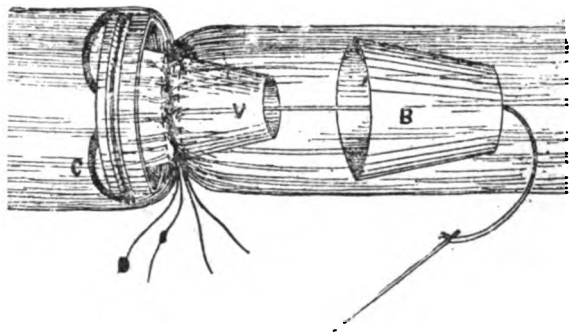


FIG. 3.

tie the upper intestine in the same way. Now steady A through the intestinal wall, and shove up B until it inverts both intestines into the flange of A. When satisfied that apposition is good, the thread should be pulled and the instrument locked. Then the thread should be pulled short and cut off.

Fig. 4 shows section of the result. The advan-

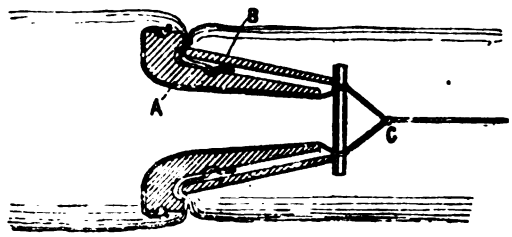


FIG. 4.

tages claimed for the appliance are that it (1) can be applied as fast as any other; (2) that it leaves very little residue; (3) that it inverts so much intestine and keeps such even pressure on it that leakage is impossible; (4) that it cuts off by necrosis the inverted part, but not so dangerously short as Murphy's button; (5) by making the flange of A larger in proportion to B, a larger intestine could be evenly joined to a smaller. The buttons are made in several sizes and can be kept in alcohol, except the elastic, which is put on by the surgeon.—Charles B. Maunsell, M. B., in British Medical Journal.

FOR OBSTINATE VOMITING.—The following is often useful for the relief of obstinate vomiting:

Rectified spirit	℥ ijss.
Menthol	ʒ j.
Tincture of nux vomica . .	ʒ ss.

M. Sig.—Ten drops to be taken every hour in a teaspoonful of chloroform water.—The Practitioner.

IF this number of the WESTERN MEDICAL REVIEW is not up to the average, kindly lay the blame on the weather. The state of the temperature at present is such as to preclude the possibility of doing anything but breathe.

Digitized by Google

Address.

ADDRESS ON SURGERY.*

BY W. W. KEENS, M. D.,
PHILADELPHIA, PA.,
PROFESSOR OF THE PRINCIPLES OF SURGERY AND OF CLINICAL SURGERY IN THE JEFFERSON MEDICAL COLLEGE.

Of the text-books in use forty years ago, except Pancoast's "Operative Surgery," every one of them was the work of a European. Gross' "System of Surgery," which has probably had a wider influence in educating the profession than any other general surgical text-book issued up to the present time, was first published in 1859. This was far in advance of most of the surgical text-books then in use. The literary labors of American surgeons consisted chiefly in translating foreign surgeries or in annotating American editions of English text-books. Within the last two decades, and especially the last, we all know, without my undertaking the invidious task of naming them, how many distinctly American surgeries have been written, and we may say, without undue national vanity, that they are the equals of any similar European works.

On more than one occasion I have had to call attention to the difference between American surgery and that of Europe. While in the department of the Practice of Surgery, after a full acquaintance and observation with European men and methods, I can state my deliberate conclusion, that the best American surgeons are the peers of the best European surgeons; yet in the department of original research, and especially of laboratory work, we must confess our very evident shortcomings.

To attempt to impress upon the members of the American Medical Association the need for such original research in this country is a work of supererogation; but I may, with propriety, insist, with all the ardent and intense conviction I feel, that every one of us, as occasion offers, should urge upon our wealthy, liberal-minded fellow-citizens the duty and also the privilege of founding, in connection with every medical school, laboratories of research, the good influence and beneficent results of which can never be estimated in paltry dollars and cents. Yet, tried even by this commercial standard, science pays. The early recognition of the germs of cholera at the port of New York some years ago, by preventing the entrance of such a commerce-destroying epidemic, leaving wholly out of consideration the saving of human life, saved to the citizens of the metropolis more millions of dollars than are represented many times over by the cost of all the laboratories now existing in this country. Our merchants should be made to understand, therefore, that even from a financial point of view, to say nothing of the humanitarian, the cheapest means of preventing the enormous business losses which occur from epidemics is by such scientific and hygienic measures as the laboratory makes possible.

The scientific progress in this half-century of surgery has separated us as by a great gulf from the past. Great theologians, such as Calvin, or a Jonathan Edwards, were they called to life, could discourse as learnedly as ever of predestination and free-will; great preachers, as a Beecher or a Spurgeon, could stir our souls and warm our hearts as of old; great jurists, as a Justinian or a Marshall, could expound the same principles of law which hold good for all time; great forensic orators, as a Burke or a Webster, could convince us by the same arguments and arouse us by the same invectives or the same eloquence that made our fathers willing captives to their silver tongues. But to-day a Velpeau, a Sir William Fergusson, or a Pancoast, all of whom have died since 1867, could not teach modern surgical principles nor perform a modern surgical operation. Even our every-day surgical vocabulary—anesthesia, bacteria, infection, immunity, antisepsis and asepsis, toxin and antitoxin—would be unintelligible jargon to them; and our modern operations on the brain, the chest, the abdomen, and the pelvis, would make them wonder whether we had not lost our senses, until, seeing the almost uniform, and almost painless, recoveries, they would thank God for the magnificent progress of the last half century which had vouchsafed such magical, nay, such almost divine, power to the modern surgeon.

The development of modern surgery, apart from surgical teaching, libraries, and laboratories, is dependent on several noteworthy factors. These have to do partly with the discovery and development of surgical principles, and partly with the development of surgical practice. Now the one and now the other is in advance. Each is the handmaid of the other. In Listerism we see surgical practice outstripping surgical principles, for of Lister it might be truly said that, by the "scientific use of the imagination," he saw the germs "when as yet there were none of them." His surgical insight convinced him of the existence of the germs of suppuration years before Ogston's and Rosenbaum's discovery of the pyogenic organism. On the other hand, the multiplication of these discoveries, which have followed, illustrate the converse—science forging ahead of practice and pointing the way to new achievements in the healing art.

Foremost among the important studies which the past fifty years have seen established on a firm foundation are pathology and pathologic anatomy. It is not a little credit to America that the first "Pathology" written in the English language was written by a young American doctor in a then small western town as early as 1839, and it was a graceful tribute to the author when Virchow, the Nestor of modern pathology, held up a copy of the first edition of Gross' "Pathological Anatomy"

* Abstract of an address delivered at the semi-centennial meeting of the American Medical Association, Philadelphia, June 3, 1897.

Digitized by Google

to the gaze of his fellow-scientists at a dinner tendered to the Nestor of American surgery.

In spite of Gross' book, however, pathology and pathologic anatomy were almost unknown sciences in 1847. The Pathological Society of Dublin was founded in 1839, that of New York in 1844, that of London in 1846, and that of Philadelphia in 1857. The microscope, and especially microscopic methods of staining, section-cutting, and the like, were in their infancy, or may, indeed, be said scarcely to have existed. No accurate views of pathology could be entertained without these aids. What is now the heritage of every first-year student was beyond the possibilities of the most advanced teacher of fifty years ago.

Allied sciences have been put under tribute to surgery. In physics, the discovery of the Röntgen ray is so recent as to require only mention.

It is due, however, especially to the development of embryology and comparative anatomy, in combination with pathology, that our views of the nature of disease have become so much more accurate.

The year before the American Medical Association was organized the world was startled and surgery revolutionized by the introduction of anesthesia; first of ether in America in 1846, and of chloroform in Edinburg in the following year. What this has done for the amelioration of the horrors of pre-anesthetic surgery very few now living can appreciate. Instead of shrieks, cries, and groans of the patient, everything now proceeds with that quiet and leisure which is essential to the performance of many, if not most, of our modern elaborate and prolonged surgical operations. Now, "the fierce extremity of suffering has been steeped in the waters of oblivion, and the deepest furrow in the knotted brow of agony has been smoothed away forever." Who could possibly endure the torture of an operation lasting for one, two, or, it may be, even three hours, when every minute seems an eternity of agony? I would rather be the discoverer of anesthesia than have won an Austerlitz or Waterloo.

The ideal anesthetic has not yet been obtained. No one can fail to see that ether or chloroform, and also a few others which occasionally replace them, have very real dangers. The ideal anesthetic will abolish pain by the abolition of consciousness, but without danger to life. That it will be found is as certain as that experiment and progress are our watchwords.

Antiseptic Surgery.—While the exact date of the revelation in surgery due to anesthesia can be fixed, a later revolution in our surgical methods came in so gradually that one cannot name any special day, or even year, when it was introduced. But, while the day or year cannot be given, the one man to whom this great revolution in modern surgery is due is well known. The name of Lister, *primus inter pares*, is honored throughout the entire surgical world, and his recent distinction as the first medical peer of the United Kingdom is an honor conferred not upon Lord Lister alone, but upon the entire profession, and worthily marks a new departure in the recognition of medical science by the queen.

So far as this country is concerned, the introduction of antiseptic surgery may be said to date from the visit of Mr. Lister to this same City of Brotherly Love at the Centennial International Congress of 1876. Derided at first as a "fad," or as "nothing more than surgical cleanliness," it has won its way over the whole world. A few laggards in the surgical army there are who even yet do not practice modern antiseptic or aseptic surgery, but the overwhelming majority of the profession recognize that the world owes a debt to Lord Lister which no honor can pay. His service to humanity will never be forgotten, and probably never will be surpassed in its wide-reaching, beneficent influence.

As an outgrowth from the practical development of antiseptic surgery has arisen a wholly new science and a wholly new method of practice, which bid fair to revolutionize our modern therapeutics—bacteriology and orrhotherapy. These are so recent that it is dangerous to prophesy what may occur, but it is not venturing far to predict that fifty years from now we shall be able not only easily to convert infected into non-infected wounds, but that by some means as yet undiscovered we shall be able successfully to combat the infection and prevent the dire ravages of tuberculosis, of syphilis, of cancer, of sarcoma, and possibly even the occurrence of benign tumors. That will be, indeed, the golden age, when surgery will be robbed of nearly all its terrors, when a peaceful victory will abolish our present instruments and the majority of our present operations.

Animal experimentation has also had a very large share in the development of modern surgery. The whole question of the introduction of animal ligatures was begun in America by Physick, who used buckskin, and his follower, Dorsey, who used kid and cut both ends short; Hartshorne, who used parchment, and Bellenger and Eve, the tendon of the deer, and has been solved principally by experiment upon animals in order to determine accurately the behavior of such ligatures in the tissues. Only professional readers can appreciate what a boon to humanity this single achievement has been. Modern cerebral surgery also owes its exactness and success almost wholly to cerebral localization and antisepsis, both of which were first studied by experiment upon animals, and later by the application of the knowledge so gained to man. Bacteriology would not now exist as a science, nor would accurate modern surgery and a large part of modern medicine be possible, had experiments upon animals been prohibited, as some zoophilus women, who love dogs better than men and women, and even little children, desire.

One of the most striking departments in which progress has been made is in that of the nervous

Digitized by Google

system. In this Mitchell, though not a surgeon, has suggested many surgical advances. South's dictum as to fractures of the skull is now violated with the happiest results, by almost every surgeon in the land. In addition to this, a very large number of tumors of the brain have been successfully removed, tumors which, before 1884, were considered as wholly outside the domain of surgery. To our English brethren, Godlee, Horsley, and Macewen, above all others, is due the credit of establishing cerebral surgery on a firm basis of right principles and successful technic.

In abscesses of the brain we have a lesion which is still more amenable to treatment, and the number of recoveries now mounts even into the hundreds. Thanks to the otologist, we can now, by proper treatment, in many cases do better than operate on these abscesses—we can prevent them.

Tumors of the spine, since Mr. Horsley's brilliant paper in 1888, have been proved accessible to the modern surgeon. Though Abbé's division of the posterior nerve roots, in cases of intractable neuralgia, has not been followed by all the success we could wish, it has proved that the operation is a practicable one.

Not only have accumulations within the pleura been evacuated, but Roberts was among the pioneers in the operation of paracentesis pericardii, while the surgery of the lung is now only taking its first tentative steps. The pericardium has also been sutured, and even the heart itself has twice been sutured, with one complete recovery. We were taught by the younger Gross that the great veins could be successfully tied, and the recent researches of Abbé and Murphy may open a new chapter in the surgery of the arteries by substituting suture for occlusion by the ligature.

The accessory organs in the abdomen have been conquered by the modern surgeon; fifty-seven tumors of the liver have been removed, with a mortality as low as 13.5 per cent. The world owes to America the operation of cholecystotomy, since it was first done by Bobbs in 1868, and was popularized by the powerful influence of Sims in 1870. Pancreatic cysts, chiefly through the labor of Senn, are now amenable to treatment. The spleen has been extirpated many times.

The appendix, that meager but most troublesome ancestral vestige which, with the bicycle, has been the faithful friend of the surgeon through the past few years of commercial depression, has been recognized as the real origin of the so-frequent abscesses in the right iliac fossa. Beginning with Willard Parker's paper in 1867 and Fitz's memorable paper in 1886, the treatment of appendicitis and even its much-abused name as distinctly of American origin, and are an immense credit to American surgery.

Until Simon's classical experiments on dogs in 1870 (Deut. Klinik, xxii, 137), the kidney was a practically inaccessible organ, but now when it wanders we secure it by suture; when there is a stone in it, we open it fearlessly and remove the stone; when it is distended with pus or urine, we drain it; and if it is past hope of recovery, we extirpate it, all with most remarkable success. Even stones in the ureter or a divided ureter, Cabot, Fenger, Kelly, and Van Hook have shown us, can be dealt with successfully.

The surgery of the pelvic organs has, one may say, been created since 1847, but its triumphs are so many that time allows me only a word. Sim's treatment of vesico-vaginal fistula and his introduction of silver wire in 1852 was distinctly an American triumph.

A hasty review such as has been given by improvements in surgery within the last fifty years does much more than show us the adroitness, audacity, and success of the modern surgeon. That is the thing that strikes us most as surgeons, but we must regard all these improvements also from the side of the patient and the family, and see what it means. It means a prolongation of life by operations which, while not without pain and suffering during recovery, have been robbed of all their primary terrors by anesthesia, and most of their subsequent pain and suffering by antisepsis. It means that patients who, in 1847, were hopelessly consigned to the grave, after weeks and months of suffering, are now, in the vast majority of cases, rescued from death. It means that the families formerlly bereft of husband or wife, parent or child, and left to spend years of sorrow, of suffering, and, in many cases, of poverty, because the bread-winners were taken away, have now restored to them their loved ones, in health and strength and usefulness. It means that the hecatombs of a Cæsar, of an Alexander, a Napoleon, are offset by the beneficent labors of a Morton, a Warren, a Lister, who are, and who for all time will be, blessed by many a poor patient who never heard of them, instead of being cursed as the destroyers of nations and of homes innumerable. It means that man's inhumanity to man shall be replaced by a scientific and Christian altruism which sheds blessings and benefits on the whole human race, seeing in the patient, whether saint or sinner, only a human being who is suffering from accident or disease, whom it is the province of the surgeon, in imitation of Him who went about doing good, to restore to health and happiness. Even where life cannot be prolonged, the agonies of death itself can be soothed by his hand and his fruitful skill.

What the future has in store for us we can only dream. Two diametrically opposing tendencies are prominent in modern surgery: radical interference with disease, so there is scarcely now a single organ or portion of the body not within our reach; yet, on the other hand, a remarkably conservative tendency in cultivating remedial rather than radical surgery. Joints so diseased as once to require amputation are now treated conservatively with the best results. Ovaries, a portion of which can be preserved, are kept in the abdomen; kidneys once doomed to extirpation are now par-

Digitized by Google

tially removed, and bones so diseased that they then required amputation are now excised and the limbs preserved. Experiments upon animals have recently given us wholly new views of infection and of the origin of many diseases, and also the little knowledge that we yet have as to either natural or acquired immunity, and to a consequent orrhotherapy.

It is, I believe, on these lines that our more immediate future triumphs will be achieved. We have discovered the actual cause of tetanus, tuberculosis, erysipelas, suppuration, and a host of other diseases and conditions, of the cause of which we were wholly ignorant a few years ago. The cause of many other disorders, both medical and surgical, still remain hidden from our view. We know almost nothing of the origin of benign tumors, and are groping to discover the origin of cancer, sarcoma, and other malignant growths. When we have discovered the cause, we are nearly half way, or at least a long way on the road to the discovery of the cure, and I think it not unlikely that in 1947 your then orator will be able to point to the time when a definite knowledge of the causes of these diseases was attained, and probably to a time when their cure was first instituted.

That will be a surgical paradise when we can lay aside the knife and by means of suitable toxins or antitoxins, drugs, or other methods of treatment, control inflammation, arrest suppuration, stay the ravages of tuberculosis, or of syphilis, abort or disperse tumors, cure cancer, and, it may be, so prolong human life that all of his then audience will die either of accident or of old age. Would that you and I could be able to live in 1947 to join in the glorious surgical Te Deum!

TO TEST WATER FOR TYPHOID GERMS.—In examining a suspected water supply, advantage is taken of the fact that the bacillus will live under conditions that are death to most other varieties. As all water contains many varieties of bacteria, some mode of isolating the bacillus typhosus is essential, and a few of the simplest are given in the hope that they may be tried by physicians who have to deal with cases of the disease. A very simple one is that suggested by Holz, which consists of merely adding ten per cent. of gelatine to the juice of raw potatoes. He asserts that while the typhoid bacilli thrive on this medium, many other varieties fail to develop, and it may be rendered still more reliable if 0.05 per cent. of carbolic acid be added. Holz states that a 1-1000 solution of carbolic acid prevents free development, and so he does not use a greater strength than 1-5000. Parietti has devised an excellent "test medium." It is prepared and used in the following manner: Make a solution containing

Carbolic acid.....	5 parts.
Hydrochloric acid (pure).....	4 parts.
Distilled water.....	100 parts.

Next prepare several tubes containing ten cubic centimeters of neutral sterilized bouillon, and add from three to nine drops of the acid mixture to each tube, sterilizing carefully after mixing the solutions. Then add a few drops of the suspected water and put the tubes in the incubator. If after twenty-four hours the bouillon has become cloudy, the cloudiness is due, according to Parietti, to the presence of the typhoid bacillus.

A very simple test is that suggested by Hazen and White, which depends on the fact that common water bacilli do not grow at a temperature of 40 C., whereas the typhoid bacilli grow luxuriantly. The present writer can testify to the efficiency of this simple method.

The casual relation of this particular microorganism may be said to have been established, and this dreaded scourge is one of the preventable diseases. If spring and well water in cities or towns be sedulously avoided, and the most ordinary precautions taken in procuring a clean supply for drinking purposes, it would be almost unknown. In every case where more than one of a family is attacked, it is the plain duty of the physician to examine the water. If in doubt he should have some experienced bacteriologist to aid him, and if it be found impure the abandonment of the supply should be urged. However poetic, there are few things more productive of disease than

> "The old oaken bucket, the moss-covered bucket,
> The home of the microbe, that hangs in the well."

—The Atlanta Medical and Surgical Journal.

"TYPHOMALARIAL FEVER."—Dr. Wm. Osler does not believe in a crossed nomenclature of diseases. In some remarks made before the recent conference of health officers at Baltimore (Maryland Med. Jour., March 27, 1897) he said: "Is there a typhomalarial fever? Yes, in the brains of the doctors, but not in the bodies of the patients. There is no combined hybrid disease, and it is only due to Woodward to say that he did not recognize a hybrid disease. Typhomalaria is a villainous name and should be banished from our vocabularies and no doctor should ever use it, particularly to his patients. It gives a man a wrong sense of security and the doctor wastes a lot of good medicine, a lot of quinine, for instance, because he thinks there is some symptom that points to malaria. I am happy to say that cases of typhomalaria are disappearing slowly from the health reports; they ought to be banished entirely. Chills, as I told you, occur frequently at the outset of a disease, and they may occur throughout the course of a typhoid fever. The state boards of health hereafter should return to every physician who sends in a diagnosis of typhomalaria his blank and ask for something better. It is too late in the day, gentlemen, to make that diagnosis."

HYOSCINE in the dose of 0.01 of a grain is of much value in the treatment of nocturnal emissions.—Hare.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$1 00
Single copies..... 10

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, JULY 15, 1897.

This number of the WESTERN MEDICAL REVIEW will fall into the hands of many who are not subscribers. To such we would say: This is our method of advertising. However, do not expect to get another copy unless you send for it. If you think that the REVIEW is worth a dollar a year let us have your dollar.

CHEAP DEGREES.

It is not only in medicine that a cry is being raised against the multiplicity of college degrees. At the recent meeting of the National Educational Association, at Milwaukee, the following resolution was carried:

"The state should exercise supervision over degree-conferring colleges, through some properly constituted tribunal having power to fix a minimum standard of requirements for admission to or graduation from such institutions, and with the right to deprive of the degree-conferring power institutions not conforming to the standard so prescribed."

Cheap, poorly equipped literary colleges, both as to teachers and otherwise, have started up all over the country, and are granting literary degrees of all kinds. It is against such that the resolution was adopted. Educators have awakened to the fact that if a college degree is to mean anything, something must be done to prevent the distribution of such honors by inefficient and low-grade colleges. There are nearly five hundred institutions in the United States that call themselves colleges, and which grant degrees. Of these the United States commissioner of education believes that not more than forty have, or ought to have, the right to the name. This estimate is probably pretty low, but it is plain that a very large majority of "colleges" are such in name only, and ought not to have the privilege of granting the same degrees as have the first-class institutions of the country.

But what will these educators do about it? Is it an evil that can be suppressed, under our present system? Possibly they will show us a way out of the dilemma, and teach us how to get rid of the cheap medical college and its diploma. If they will strike at the root of the matter, and make it impossible for two or three men to be able to get a charter for the asking, as it is at present, some hope for the betterment of the existing conditions may be looked for. Here is where the trouble lies. It is absurd that it is so, but the fact is a half dozen, more or less, men or women can organize a college, medical or literary, and get a charter which gives them the legal right to grant the degree of Doctor of Medicine, or Master of Arts. They do not have to show that they are qualified to teach, that they have the facilities for teaching, or anything of the kind. Again, we repeat, this is absurd.

We wish the National Educational Association success in their efforts to do away with cheap colleges and cheap degrees, but it is with considerable misgivings that we await developments.

DISEASE OF THE HEART.

At the late meeting of the American Medical Association there were a group of papers of unusual interest read on diseases of the heart. In its May number the REVIEW called attention to the difficulties of prognosis, and pointed out the fact that as data accumulated the prognosis would become more reliable. Dr. Rochester's paper illustrates this point. In heart disease it is only by means of mastery in diagnosis and pathology that the more refined shades in prognosis are possible. The paper points out that in mitral lesions obstruction is more serious than insufficiency. And this for two reasons: If due to vegetations, there is the danger of embolus; if from stenosis, the danger of strain and dilatation of left auricle with obstruction, by back action, of the pulmonary circulation, eventually extending to the right heart, which always increases the gravity of the prognosis. This is all simple enough, but very necessary to be borne in mind.

In lesions of the aortic valve, unlike the mitral, insufficiency or regurgitation is of more serious

Digitized by Google

import than obstruction. Vegetation occurs less often here than on the auriculo-ventricular valves, and a stenosis is more easily overcome by hypertrophy of the left ventricle. While in aortic insufficiency, upon beginning ventricular diastole, the blood rushes in from both directions,—in its onward movement and in a backward movement, —the ventricle quickly becomes over-filled, dilated, and embarrassed. If the dilatation is not accompanied by corresponding thickening of the wall, we have the most serious form of heart lesions. Of course, an onward lesion of the mitral or a backward lesion of the aortic is aggravated if the one be accompanied by a regurgitation and the other by a stenosis. Valvular lesions are grave in their prognostic import in proportion to the amount of degeneration, or weakening, of the cardiac muscles.

All valvular diseases of the left heart come at last to impaired pulmonary circulation, congestion and edema of the lungs, with over-distention of right heart, leading to venous engorgement and capillary dilatation. Evidently a bad train of symptoms. If to these is added congestion of the kidneys and liver, other elements of danger are then present. But acites in disease of the heart is not always of so serious an import. Sometimes it is a coincidence depending upon a liver whose disease is independent of the heart lesion. The careful prognosticator will always exclude this.

If effusion into the pleural cavity or the ventricles of the brain can be made out, the prognosis becomes still worse. Of course, all these signs of failing circulation are brought about by loss of strength in the cardiac muscles, and this must be distinctly borne in mind if any effort at medication is to be attempted.

LEGISLATION RESTRICTING ANIMAL EXPERIMENTATION.

In the senate of the United States there is a bill entitled "A bill for the further prevention of cruelty to animals in the District of Columbia." While it affects the District of Columbia only, it is well known by its promoters that if they can get congress to pass such a law, it will then be an easy matter to get like laws passed in all the states of the Union. In fact, such was the claim made over a year ago in a circular sent to all the humane societies in the country. This circular called upon all humane societies to unitedly work for a law in congress, which should be the entering wedge for like legislation all over the country. This bill now in the senate—senate bill No. 1063—establishes rigid restrictions under which experiments on animals may be made, and punishes with heavy fine and imprisonment those who violate these restrictions. The bill, if passed, practically stops all animal experimentation, no matter how laudable may be the object.

There is no doubt that the namby-pamby individuals who are fighting with all their might for the bill in question believe they are doing a noble work. At least we will give them this much credit. But the trouble is they know nothing about the matter. They believe all the gush and rot that is published by the would-be reformers calling themselves antivivisectionists, and take no notice of the demands made by those who know how and what is being done, and has been done in the past, for the advancement of medical science. Dr. W. W. Keen, in his recent masterly Address in Medicine before the American Medical Association, said:

"Animal experimentation has had also a very large share in the development of modern surgery. The whole question of the introduction of animal ligatures was begun in America by Physick, who used buckskin, and his follower, Dorsey, who used kid and cut both ends short; Hartshorne, who used parchment, and Bellenger and Eve, the tendon of the deer, and has been solved principally by experiment upon animals in order to determine accurately the behavior of such ligatures in the tissues. Only professional readers can appreciate what a boon to humanity this single achievement has been. Modern cerebral surgery also owes its exactness and success almost wholly to cerebral localization and antisepsis, both of which were first studied by experiment upon animals and later by the application of the knowledge so gained to man. Bacteriology would not now exist as a science, nor would accurate modern surgery and a large part of modern medicine be possible, had experiments upon animals been prohibited, as some zoophilous women who love dogs better than men and women and even little children desire."

It is useless, however, to give arguments in a medical journal in favor of experimentation on animals. Every physician knows well the remarkable progress that has been made in every branch of medical and surgical science by work done on living animals. And every physician knows, too, that the work done is with comparatively little suffering to the animals. This is written, however, for the sole purpose of asking every reader of the Western Medical Review to use his influence in having this bill beaten. Let every physician write to one or both of the senators from his

Digitized by Google

state and urge him or them to oppose the bill. It will take but little time, and the influence of such letters will be great. There is no time for delay. Do it now. The antivivisectionists are working hard, and there is no influence brought on the other side but that which is brought by the medical profession. If we do not do our duty in the matter—and it is a duty—none will.

FORCED INCURVATION OF THE VERTEBRAL COLUMN IN THE TREATMENT OF TABES DORSALIS.

This simple method of treatment for locomotor ataxia is evidently an outcome of the "suspension treatment" so much used several years ago, but does not seem to have met with the favor at the hands of the profession that it deserves. The procedure is very simple, requiring no special apparatus—none at all, in fact, if the service of two strong and intelligent persons can be had for five minutes once in twenty-four hours. The technique is as follows: Place the patient upon either side upon a hard bed or roomy table. Let one person grasp the head firmly with both hands, while the other makes firm pressure upon the region of the sacrum. By a concerted effort, let the vertebral column be forcibly flexed until there is developed a degree of tension markedly painful to the patient. Continue this for five minutes, during which time there may be momentary relaxations, to be instantly followed by an increased tension; the intermittent tension and relaxation to be continued for five minutes. One person can accomplish the same result by the use of a broad strap and roller buckle, from which the tongue has been removed, by passing the strap over the vertex and under the middle of the thighs, or just behind the knees.

Unfavorable criticisms from those who claim the cure cannot be effected by any amount of force exerted upon the vertebral column may be forestalled by reference to recently published experiments by Bounzzi and others, of the French Academy of Medicine, whereby it is shown that by forced incurvation of the vertebral column an elongation of the rachidian axis is produced, these experiments having been made repeatedly upon the cadaver.

The profession is indebted to M. Blondel, of Paris, for this simple little procedure, he having first published his plan in March, 1895. He holds that "the elongation of the posterior columns of the cord, without retarding the evolution of the process of sclerosis, which has invaded them, acts particularly upon the young and newly formed sclerosed tissues, thus preventing the effects of the additional sclerosis from manifesting itself."

It is not claimed that this will cure tabes dorsalis, but rather that it will give relief from the lightning pains and greatly improve the tonicity of the bladder; also that failure of the sexual power will be arrested. G.

Notes and News.

DR. J. M. HARDY has removed from Fontanelle to Cairo, Neb.

DR. W. H. SHERWIN has removed from Sterling to Clatonia, Neb.

DR. CLINTON DAY has removed from Ridgeway, Wis., to Merna, Neb.

DR. H. A. ABBOTT, at one time located at Waterloo, Neb., is now practicing at Saratoga, Wyo.

DR. E. M. WHITTEN, of Nebraska City, has been appointed physician to the State Institute for the Blind.

DR. A. P. FITZSIMMONS is now located at Tecumseh, having removed from Linwood, Neb., to that place.

DR. N. S. DAVIS had the degree of doctor of laws conferred upon him on June 17 by the Northwestern University.

THE American Institute of Homeopathy will meet next year in Omaha, some time in June. Dr. A. R. Wright, of Buffalo, N. Y., is president.

GOVERNOR ADAMS, of Colorado, has signed the bill prohibiting the sale of cocaine without a written prescription of a licensed physician or dentist.

AND now we are apprised of the fact that the Bellevue Hospital Medical School and the New York Medical School have abandoned the idea of amalgamating.

DRS. E. J. AND ALMA ROWE have moved from Beaver Crossing to Milford, Neb., the latter having been appointed physician to the Milford Industrial Home.

THE doctors seem to be running the schools in Nebraska City. Dr. Claude Watson has just been elected president and Dr. Whitten vice president of the school board.

THE Medical Department of Johns Hopkins University conferred the degree of M. D. for the first time on June 15 last. The first class graduated at that time, fourteen men and one woman.

DR. MILO B. WARD, of Topeka, Kan., has decided to change his location to Kansas City, Mo. Dr. Ward has an enviable reputation as a gynecologist and abdominal surgeon, and will be quite an accession to the profession of Kansas City.

Digitized by Google

Dr. L. A. Berger, one of the leading physicians of Kansas City, was shot on the 8th inst. and died shortly afterwards. The murderer, one Schlegel, claims that the doctor had assaulted his wife, a patient, while at the doctor's office a few days before.

Drs. W. L. Dayton and A. D. Wilkinson, of Lincoln, are to give a course of lectures at the Creighton Medical College next winter, the former on ophthalmology, the latter on obstetrics. Dr. J. L. Greene will also give a course of lectures in the same institution, on jurisprudence of insanity.

A bill is in the Michigan legislature which, if it passes, will be a good thing and ought to be passed along. It provides for the castration of all inmates of the Michigan Home for the Feeble-Minded and Epileptic, before their discharge. The same happy result is to follow the third conviction of a felon and those convicted of rape.

A colored student of Rush Medical College has begun suit in the circuit court, Chicago, for a writ of mandamus compelling the authorities of the college to issue to him a diploma. The diploma, it is claimed, was withheld because the student copied his answers in his final examination. This he denies, and demands either proof of the charges or his diploma.

Dr. W. M. Polk, of New York, writes to the Medical News and calls attention to the treatment of fibroid tumors of the uterus with thyroid extract. He claims to have been having remarkable success with its use in several cases. In each case not only has growth been checked, but there has been a decided retrocession, accompanied by marked amelioration of local symptoms and improvement in general health. It should be given in the same manner and with about the same limitations as in myxedema, its effect upon cardiac action and arterial tension being closely watched.

The Kneipp cure fad has about run its course. The distinguished Roman Catholic priest by this name who started the treatment died, after a long illness, at his sanitarium in Bavaria, on the 16th of June. His patients were compelled to walk barefooted on the snow in winter and on the wet grass in summer, in the early morning, which was certainly a hardening treatment and conducive to curing certain neurotic diseases, especially those of an hysterical nature. During the past few weeks two of the Kneipp cure sanitariums, on which considerable money had been expended, have gone under, and, now that the founder is dead, the system will soon be among the fads that have been.

A society has been organized in St. Louis under the name of the Missouri Medical League of St. Louis. This organization is the result of the recent investigation in regard to the free clinics and dispensaries in St. Louis, and it has for its object the elevation of the medical profession. One of the principal objects, as stated in its constitution, is the securing of the establishment of a state board of medical examiners. Added to this will be the suppression of free dispensary and clinic abuses, and the fostering of fraternity among the members of the medical profession. Judging from developments in medical circles in St. Louis during the last three months, there is certainly need of such an organization. There are also several other places that we might mention where such an organization might find a profitable field for work.

When the chairman of the Rush monument fund had made his report at the recent meeting of the American Medical Assocation, someone moved that the association appropriate $1,000 annually until the fund shall be raised. Considerable enthusiasm developed when Dr. Graham, of Denver, made a motion to amend that the association proceed at once to raise the $100,000, and guaranteed one-fiftieth, or $2,000, from Colorado. Other states made the same offer afterwards. It was whispered around that these promises did not amount to anything, and that Colorado was merely showing a little western brag. But at the annual meeting, on June 15, in less than two weeks after the pledge was made, the Colorado State Medical Society raised the full amount by individual subscriptions, setting an example for the big eastern states to follow that will certainly shame them into doing something. And, by the way, what is Nebraska going to do about it?

In the current number of the Mirror the editor, jovial I. N. Love, in a personal editorial tells of the trouble he has gone through during the past year in having illness in his family. This illness necessitated the performance of laparotomy twice on the same loved one during this time. This experience taught him to value at its true worth the friendship and help of his confreres. He says: "The bright redeeming feature of the year's experience was the prompt, faithful, and loving service received from members of my profession. I have felt from the time I entered it, and long before, from impressions received from those whom I knew as doctors, that the medical profession as a whole was composed of the best men on earth. My convictions in this direction have been strengthened. I firmly believe that no other body of men anywhere, no matter what they may be engaged in, are as devoted to each other, are as prompt in responding to a summons for aid, as physicians. Doctors may have their differences, but let trouble come and those differences are dissipated as the sun melts the morning dew."

Styes may sometimes be aborted by an inunction of the yellow oxide of mercury, or by the application of a saturated solution of boracic acid. Hot compresses relieve the pain. When styes appear at frequent intervals, the internal use of sulphuret of calcium is recommended.—Hare.

Digitized by Google

Miscellaneous.

EASY ALBUMIN TEST.—Draw up into a pipette about a half inch of urine. Then insert the pipette into nitric acid and draw up the same amount of acid. The line of white will show if albumin be present.

FOR dyspnea resulting from any congested condition of the lungs try steam of ammonia with eucalyptus. Place an ounce of muriate of ammonia and two drams of oil of eucalyptus in a quart of water and place over an alcohol or other stove, and arrange it so that the steam will be carried to the patient.—J. O. Dawson.

THE VILE OSTEOPATHY BILL.

OMAHA, NEB., June 25, 1897.

To the Editor: I am glad to see you publish the names of the senators who supported the vile osteopathy bill in your legislature. Now, if every doctor in Illinois (my native state) will cut the list out and paste it in his hat, and then fill his political pocket full of stones for the benefit of these creatures when they raise their heads above the grass, something practical will be accomplished. This form of "argument" is the only one that really reaches the vitals of the average politician. In the Nebraska legislature last winter our bill for an examining board was defeated, largely owing to the opposition of an Omaha senator, who was, immediately after, the nominee of his party for mayor of this city. At least fifty physicians at once organized in opposition to the gentleman, and, in a close election, we had the satisfaction of seeing him defeated by 200 votes. We actually found that doctors have a good many friends who are willing to favor them if they will simply get out and ask for what they want, just as other fellows do. The trouble in the past has been too much modesty and too little uniformity of action. Our fight for an improvement in our medical law is all that kept osteopathy in the background in Nebraska. A bill was prepared and ready to introduce, but there were too many doctors on deck all winter to allow any crooked work. All honor to your governor and to those of South Dakota and Colorado for their sensible stand on this vicious bill. It seems to me that the doctors in those states should remember them most kindly for all time to come.

Respectfully yours, B. F. CRUMMER, M. D.

—Journal American Medical Association, July 3.

Society Proceedings.

TO THE MEMBERS OF THE NEBRASKA STATE MEDICAL SOCIETY.

The proceedings of the last meeting of the Nebraska State Medical Society are now in the hands of the printer. Those who had papers, read by title or otherwise, should send the same to me at once. The names and addresses of the members will be printed in the proceedings, and I would like to be informed immediately of any changes in address since the publication of the last book.

Please bear in mind that, according to resolution adopted by the society, the proceedings will be sent to only those in good standing, which means that dues are paid up to date. Dr. Knapp, of Lincoln, will be glad to send you a receipt.

The book will be ready in about three weeks.

GEORGE H. SIMMONS,
Secretary Nebraska State Medical Society.

Lincoln, July 12.

THE Fremont (Iowa) County Medical Association met at Sidney and elected Dr. T. C. Cole, of Thurman, president, and S. B. Ambler and C. E. Hoover, vice presidents; Dr. E. F. Cowger, of Riverton, secretary, and Dr. J. H. Cole, of Thurman, treasurer.

AT the meeting of the South Dakota State Medical Association at Mitchell the following officers were elected for the ensuing year: President, W. E. Moore, of Tyndall; first vice president, I. W. Coe, of Vermillion; second vice president, A. H. Bowman, of Deadwood; secretary and treasurer, W. J. Mayturn, of Alexandria; assistant secretary, and treasurer, F. H. Files, of Sioux Falls; chairman of legislative committee, S. A. Brown, of Sioux Falls; chairman committee on arrangements, F. H. Files, of Sioux Falls.

THE Colorado State Medical Association held its annual meeting at Denver June 18. The new officers chosen are: President, Dr. L. E. Lemen; first vice president, Frank Finney, of La Junta; second vice president, J. Tracy Melvin, of Saguache; third vice president, Mary H. Barker Bates, of Denver; corresponding secretary, H. B. Whitney, of Denver; treasurer, W. F. McClellan, of Denver; recording secretary, Minnie C. T. Love, of Denver; assistant recording secretary, George Hamilton, of La Jara; admission committee, T. A. Hughes, of Denver, A. J. Robinson, of Aspen, S. D. Hopkins, of Denver, R. F. Graham, of Greeley.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

The next meeting of the Mississippi Valley Medical Association will be held in Louisville, on October 5, 6, 7, and 8, 1897. All railroads will offer reduced rates. The president, Dr. Thomas Hunt Stucky, and the chairman of the committee of arrangements, Dr. H. Horace Grant, promise that the meeting will be the most successful in the history of the association, and this promise is warranted by the well-known hospitality of Louisville and Kentucky doctors. Titles of papers should be sent to the secretary, Dr. H. W. Loeb, 3559 Olive street, St. Louis.

Digitized by Google

THE quarterly meeting of the Gage County Medical Society will be held at Beatrice, Thursday, July 15, 1897, 1:30 P. M., Paddock parlors. Following is the program: Bright's Disease, Dr. A. R. Mitchell, Lincoln, Neb.; Treatment of Fractures of the Femur in the Aged, Dr. A. B. Anderson, Pawnee City, Neb.; Dysmenorrhea, Dr. P. M. Hobbs, Wymore, Neb.; Diabetes, Dr. H. A. Given, Wymore, Neb.; Heart Disease, Dr. W. J. Harris, Beatrice, Neb.; Antiseptic Therapy as Applied to Diseases of the Nose and Throat, Dr. C. A. Bradley, Beatrice, Neb. The officers of the society are: Dr. A. V. Robinson, president; Dr. I. N. Pickett, vice president; Dr. H. H. Smith, secretary; Dr. W. J. Harris, treasurer. Members are expected to be present. Visiting members of the profession are cordially invited to attend.

ELKHORN VALLEY MEDICAL SOCIETY.

(Reported by the Secretary, Dr. F. A. Long, Madison.)

The midsummer meeting of the Elkhorn Valley Medical Society occurred at the Oxnard Hotel, Norfolk, Neb., July 6. There were present Drs. Scofield of Tilden, Person of Stanton, Hagey of Norfolk, Tanner of Battle Creek, Gay of Pierce, Cherry of Winside, Minton of Oakdale, Frink of Newman Grove, Allison of Omaha, Putnam of Stanton, Daniels, Salter, Richards, Bear, of Norfolk, Conwell of Neligh, Lea of Hoskins, Long of Madison.

The following were elected to membership: Dr. C. C. Allison, Omaha; Dr. D. A. Lewis, Albion; Dr. E. D. Putnam, Stanton.

On motion of the secretary, Dr. W. L. Bowman, of Stanton, who was present, one of the first practitioners in the Elkhorn valley, and a physician of fifty years' experience, was made an honorary member.

Dr. P. H. Salter read a paper on "Recurrent Amnesic Aphasia Following Attacks of Jacksonian Epilepsy," which will be published later.

In the discussion which followed, large doses of iodide of potassium, long continued, were recommended for trial, in the hope of absorbing inflammatory exudates possibly existing in such cases. Operation to remove pressure and relieve depression was urgently recommended if attacks recur.

"A Case of Supposed Tumor of Abdomen," a patient of Dr. Alden, of Pierce, was brought before the society for examination. Patient, aged sixty, pensioner, has had pain in the stomach after eating for four years. Lived almost exclusively on milk diet. Felt a hardness in stomach all the time. Several physicians had diagnosed same kind of tumor. The case created a good deal of interest and was thoroughly examined by nearly all present.

Dr. Allison, discussing the case, denied the existence of tumor and gave a diagnosis of chronic gastritis. Thought patient had possibly mentally exalted his troubles in an endeavor to get an increased pension. Drs. Conwell, Tanner, and Salter, following in discussion of case, corroborated Dr. Allison's diagnosis.

Dr. Edward Tanner, of Battle Creek, read a paper on "Diphtheria of Cervix and Vagina," reporting an interesting case of a seventeen-year-old girl in confinement, who, several days after labor, gave the usual outward symptoms of profound puerperal infection—chills, high temperature, rapid pulse, pain, etc. When placed in position for uterine irrigation and curetting the entire vagina and cervix were found to be covered with a grayish-white membrane. Examination of throat revealed a small diphtheritic patch on uvula. Carbolic acid was applied and the case treated on general principles laid down for grave cases of diphtheria, the case making a slow but eventful recovery. No diphtheria prevailed in the neighborhood.

Dr. Salter had seen the case in consultation, and testified to its diphtheritic character.

Dr. Person thought such cases purely accidental. No reason why diphtheria may not manifest itself, locally, in the vagina as well as in throat.

Dr. Minton had never seen diphtheria on any mucous surfaces except the upper air passages.

Dr. Conwell had seen diphtheritic patches appear on abraded skin surfaces during an attack of diphtheria. He had been bitten in the thumb once by a diphtheria patient, and inside of four days developed a beautiful diphtheritic patch on abraded thumb. Besides a very sore thumb and the loss of the nail, no serious results followed.

Dr. Long had seen a puerperal patient a year ago with a false membrane, possibly diphtheritic, over a lacerated cervix.

Dr. Frink, of Newman Grove, read a paper on the "Summer Diarrhea of Infants, with Report of a Unique Cure." A recently arrived Dane had been annoyed by a persistent diarrhea, to relieve which he had introduced a "Castoria" bottle into the rectum, having first taken the precaution to attach a string to the neck. Finding removal impossible, medical aid was summoned and the foreign body removed through a speculum. The diarrhea had ceased.

Discussing the treatment of summer diarrhea in infants, Dr. Long considered twenty-four hours of fasting, together with the administration of small doses of milk chloride, as, in all recent cases, of the first importance, and thorough and systematic irrigation of the bowels with warm water or warm salt solution as next in importance. The gastro-intestinal canal must be rid of the fermenting mass before curative measures can avail anything. The reduction of the temperature of the room is very important in midsummer. In one case occurring in a dry and dusty September, with the thermometer reaching nearly 100 degrees every day, he had a patient very sick with enterocolitis, in which vomiting and purging were persistent, abdominal pain, high temperature, and repeated convulsions alarming. A 100-poung lump

Digitized by Google

of ice was brought into the room and placed in a tub and the temperature thereby reduced about 10 degrees, with noticeable improvement of patient. In several cases of persistent vomiting and purging, abdominal pain, frequent convulsions, he had resorted to the hypodermic injection of morphia, giving to a child a year old one twenty-fourth of a grain, with satisfactory results.

Dr. Person emphasized the necessity of clearing out bowels early, preferring castor oil for that purpose.

Drs. Minton, Hagey, and Scofield had never used morphia hypodermically in children with enteric diseases, but thought it might be all right in suitable cases.

Dr. Salter saw no reason why morphia might not be given and generally commended the remarks of Dr. Long, especially as to starvation and irrigation.

Dr. Bear vigorously assailed the administration of morphia hypodermically in bowel trouble of children.

Dr. Person, of Stanton, reported (extemporaneously) "A Case of Fracture of the Head of Radius and Condyle of Humerus" in a child of seven, in which fractured condyle could not be held in place with the arm in angular position. A straight splint was therefore applied and the patient kept in bed. In ten days an obtuse-angled splint was applied, condyle was found united, but skin had sloughed over process of fragment, periosteum only covering it. The case, though recent, is evidently making a good recovery, with perfect motion of elbow.

Dr. Allison, speaking of the case reported, said the latest authorities employed the straight splint in fractures involving the elbow joint, the straight position being the one in which the elbow is at rest.

Dr. P. H. Salter gave a short "Report of the Cases of Two Persons Injured in the Miniature Cyclone in Norfolk" recently. Both parties suffered from concussion and had numerous bruises. One had the ligaments of the ankle torn. The other had sustained a fracture of the coccyx and ramus of ischium, and inflammation of the neck of bladder resulted from the impact of the same body which produced injury to bony structures.

Dr. F. A. Long, of Madison, related "The History of Two Recent Cases of Osteo-Sarcoma." Both patients dead within four months after the disease was first noticed. One, a patient of 42, had sarcoma of neck of humerus, with secondary involvement of the liver and of the condyle of the humerus, a point at which a fracture had occurred in the early history of the disease. The other was sarcoma of the ribs in a man of twenty, the tumor extending from the ensiform cartilage around under right nipple, almost to axilla. Externally, tumor was size of fist, but oblong and large, with physical signs denoting encroachment of the mass on the right lung. Operative measures were not advised in either case, the symptoms forbidding it.

Board of Health Proceedings.

NEBRASKA STATE BOARD OF HEALTH.

MEMBERS—Dr. C. F. Stewart, Auburn, President; Dr. B. F. Crummer; Omaha, Vice President; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.

THE Nebraska State Board of Health, at its meeting held June 17, granted certificates to the following:

Chester A. Brink (R.), Ord,
College of Physicians and Surgeons, Chicago, 1893.

Thomas M. Cullimore (R.), Beatrice,
University City of New York, 1877.

W. L. Stiers (R.), Dawson,
College of Physicians and Surgeons, Kansas City, Kan., 1897.

C. D. Morrow (E.), Cedar Creek,
Cotner, 1895.

James Frank Davies (R.), Callaway,
Omaha Medical College, 1893.

William A. Alton (E.), Firth,
Lincoln Medical College, 1897.

C. W. Baird (H.), Beatrice,
Homeopathic Medical College of St. Louis, 1897.

Mary Elizabeth Rosenberg (R.), Omaha,
Omaha Medical College, 1897.

Sallie Frances Kennedy (R.), Belden,
Sioux City College of Medicine, 1897.

Louis N. Anderson (R.), Fremont,
College of Physicians and Surgeons, Kansas City, Kan., 1896.

Harry Walton Kirby (R.), Kimball,
University of Pennsylvania, 1896.

Willis E. Talbot (R.), Broken Bow,
Omaha Medical College, 1897.

Joshua G. Hill (E.), Omaha,
Eclectic Medical Institute, Cincinnati, 1878.

David W. Beattie (R.), Worden,
Omaha Medical College, 1897.

Thomas R. Muller (R.), Omaha,
Creighton Medical College, 1896.

Lewis H. Sixta (R.), Schuyler,
Chicago Medical College of Northwestern University, 1889.

The following was refused:

Charles W. Richards, Hemingford,
Wisconsin Eclectic Medical College, 1897. (Bogus diploma mill.)

Necrology.

JAMES GREIG SMITH.

Death has removed another of the stars from the bright firmament of modern surgeons. James Greig Smith recently died at Clifton, near Bristol, England, at the early age of forty-three, his death being caused by pneumonia. Through his great work, "Abdominal Surgery," and other writings, the name of Greig Smith has become as well known, and has been for some years, as that of

Digitized by Google

any surgeon. But his great fame was among those who knew him, and this extended into Scotland, as well as all over England. This fame was the result of the work he did, of his surgical ability, and not from his writings. Considering his age at death, Greig Smith may well be classed as one of the greatest of modern surgeons.

J. LEWIS SMITH.

Dr. J. Lewis Smith died suddenly of apoplexy in New York June 9, in his seventieth year. Dr. Lewis Smith was one of the leading authorities in this country on diseases of children. His work on "Diseases of Children," first published in 1869, has gone through nine editions and has been a standard text-book for more than a quarter of a century. He has also been a voluminous writer, having contributed to many of the leading medical journals, and to several cyclopedias, systems, and hand-books.

DR. WM. T. LUSK.

New York lost one of her leading physicians, and the profession at large one of its leaders, on June 14. On that date Dr. Wm. T. Lusk died at his home in New York of apoplexy, just as he was packing his satchel preparatory to spending Sunday with his family in the country. At the time of his death he was professor of obstetrics and gynecology at Bellevue Hospital Medical College. Had he accomplished no more than to write the book, "Science and Art of Midwifery," his reputation would have been made, for it was and is the best text-book on obstetrics that was ever written. He was only forty-nine years of age at his death.

Books and Pamphlets Received.

Notes on the Treatment of Fecal Fistula. By F. H. Wiggin, M. D. Reprint from Medical Record.

Overfatness, a Reliable and Harmless Way to Diminish and Cure It. By W. T. Cathell, M. D. Reprinted from Maryland Medical Journal, June 19.

The Northwestern Journal of Education, published at Lincoln, Neb., comes out this month under a new name, with a new dress and an entirely new form. Its old friends would not know it with all these changes. The new name is "The North Western Monthly." The current number begins a new volume and is devoted to "The Physical Child," with articles from some of the best writers in the country, all practical and well worth reading. While written principally for the teacher and parents, they would be found of interest to the physician as well. Among the subjects are "Play in Education," "Kindergarten Games," "The School Recess," "Defects of Sight," "Defects of Body," "Defects of Speech," "Defects in Hearing," "Foods, Stimulants, and Narcotics," "Children's Clothing," "General Suggestions on Sleep, Bathing, etc.," "Rural School Buildings," "Location and Sanitation of School Buildings," "Results of Bad Ventilation," and "School Furniture," etc. Among the contributors are: Supt. G. E. Johnson, Andover, Mass.; Prof. Walter Magee, University of California; Dr. H. S. Baker, St. Paul, Minn.; Dr. R. A. Clark, University of Nebraska; Dr. Oscar Chrisman, Kansas State Normal; Dr. H. K. Wolfe, University of Nebraska; Dr. Katherine Wolfe; Dr. Chas. W. Lyman, New York City; Dr. E. J. Angle, Lincoln, Neb.; Dr. C. F. Menninger, Topeka, Kan.; Dr. Wm. O. Krohn, University of Illinois; Dr. Gilbert M. Morrison, Kansas City, Mo.; Dr. W. H. Burnham, Clark University; Dr. H. B. Ward, University of Nebraska. The price for this special number is 25 cents.

The Eye as an Aid in General Diagnosis, a Hand-Book for the Use of Students and the General Practitioner. By E. H. Linnell, M. D. Philadelphia: The Edwards & Docker Co.

This little book of 248 pages is largely a compilation of our present knowledge in regard to the ocular manifestations of general diseases. That there is room for such a work in our language is undeniable. Until two years ago, when Knies' book, "Relations of Diseases of the Eye to General Diseases," appeared in its English dress, we were without any comprehensive work on the subject. Indeed, the consideration of this conjoint and interdependent relation has been strangely neglected by medical authors. Some eighteen years ago Förster wrote on the subject in Graefe and Saemisch's "Handbuch der Augenheilkunde," and quite recently Berger's treatise in French appeared. These works, with Gower's classical manual, "Medical Ophthalmoscopy," the last edition of which appeared in 1890, comprise the treatises hitherto in existence. The author has strangely neglected to notice these works, with the exception of that of Knies. The book has been written and the subjects classified from the standpoint of the specialist. It would seem that a work designed for the use of the general practitioner would be more generally useful were the subject handled from his point of view. Book matter may be strictly accurate and trustworthy, but be rendered comparatively useless and inaccessible by faulty arrangement. In palliation of this, however, it must be said that the admirably complete index goes a long way toward off-setting defective arrangement. This work is a compend, and fairly complete, and any attempt to deal with its contents, in a short space, would do it an injustice. It shows extensive reading and painstaking sifting, particularly of American literature. One could wish that ophthalmoscopic symptoms were more fully considered, and that the use of the ophthalmoscope as an aid in the diagnosis of general diseases were more forcibly insisted upon. With all its limitations, however, this little book will be a valuable aid to the busy practitioner.

COOK.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL II. No. 8. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. AUGUST 14, 1897.

Original Articles.

IMPORTANCE OF EARLY OPERATION IN INTRAOCULAR SARCOMA.*

BY D. C. BRYANT, M. D.,

OMAHA, NEB.

PROFESSOR OF OPHTHALMOLOGY, CREIGHTON MEDICAL COLLEGE.

In looking over the list of cases of intraocular sarcoma which have come under my care in the past ten years, I find fifteen in which the history has been recorded to the death of the patient or to the present time, the patient still living. From the most of these specimens have been preserved showing the size of new growth and condition of eye-ball at time of removal. In all but four cases the growth had perforated the walls of the eye-ball, and had attained to some considerable size before an operation was consented to. The histories of these cases are interesting, as they emphasize, as only clinical experience can, the great importance of early operation in this class of cases. Only a brief outline of each will be given here, but enough to show the slowness or rapidity with which a return took place or death occurred.

CASE I.—Male. Was first seen in the summer of 1887. Diagnosis of sarcoma of left eye was made and enucleation advised. This was not consented to until a few months afterward, when eye-ball was removed. In this case the new growth had perforated posterior wall of eye-ball, as is plainly shown in preserved specimen. The growth, external to eye-ball, was small, and not closely connected with the surrounding tissues, consequently operative measures were not carried further than the enucleation of the eye. The hope was indulged in that a good cushion for an artificial eye could be preserved in this case, thus improving the patient's appearance, and still run little risk of a return of the growth. For four years our hopes seemed likely to be fulfilled, as during that time no symptoms of return had become manifest, but with the beginning of the fifth year a return of the growth occurred, making its appearance in the soft tissues of the orbital cavity. An operation was immediately performed, the orbital cavity being completely eviscerated, which had the effect of procuring another respite from the trouble, this time being a period of two years. Since then it has been found necessary to resort to operative measures at three different times, the last of which was some six weeks ago, when the floor of the orbital cavity and the anterior wall of the antrum of Highmore were removed, and a sarcomatous growth removed from that location. This patient will be able to resume his labor again in a week or two, but his constitution is already sadly undermined, and the beginning of the end is in sight.

CASE II.—A young married woman. Came under my care at about the same time No. 1 did. Operation was advised in this case and consented to immediately. The eye was enucleated and the walls found to be intact, the growth occupying about one-third of the intraocular space. Specimen No. 2 shows the size and location of this growth, also the apparently normal condition of that portion of wall of eye-ball immediately adjacent to growth. This is one of the most strongly marked melanotic tumors I have ever seen, being of inky blackness. This patient has been under observation, that is, seen occasionally, for ten years, and has never shown any indications of a return of her former trouble.

CASE III.—A boy, aged 3 years. Was first seen by me in December, 1888. At this time the tumor had already perforated the tunics of the eye-ball, and there was a large growth protruding from the temporal side of the eye. The eye was enucleated and the orbital cavity eviscerated, and yet within three months' time there was a return of the sarcomatous growth in the orbital cavity, and probably also one in the cranial cavity, as the child died with symptoms of compression of the brain. No autopsy was allowed.

CASES IV, V, and VI were in patients from twenty-five to thirty-five years of age, and in all the growth had perforated and extended beyond the eye-ball. In each a return occurred within a year, and all died in less than three years from time of first operation.

CASE VII.—A young lady, 23 years of age. Was first seen in March, 1890. Sarcoma of right eye was diagnosed and enucleation advised. After a few days consent was given and eye-ball was removed. After-examination showed an intraocular growth, which had not perforated or even thinned the walls of the eye-ball. This patient is alive and well to-day, and up to date, seven years after operation, has shown no symptoms of returning trouble.

CASES VIII, IX, X, and XI were patients whose ages were thirty, twenty-four, forty-three, and forty-five, respectively. In each the growth had extended beyond the eye-ball before being operated on, and in each a return occurred in from one to two years, and all died in less than five years after first operation.

CASE XII.—A little girl, 4 years of age. Came under my care in May, 1893. A diagnosis of glioma of left eye was made in this case and enucleation advised. The eye was removed, and microscopical examination did not verify my diagnosis, but showed the tumor to

* Read before the Nebraska State Medical Society, Lincoln, May 20, 1897.

Digitized by Google

be a very slightly pigmented sarcoma. This patient is a strong, healthy little girl to-day, and so far, some four years now, has shown no evidence of further trouble.

CASE XIII.—Male, aged 53. Consulted me in regard to his right eye in February, 1893. Diagnosis of sarcoma was made and immediate removal of eye was urged. Some ten days later patient consented to the operation and the eye was enucleated. The growth in this case, as will be seen from specimen, filled the greater part of intraocular cavity, but had not perforated or thinned the walls of eye-ball to any great extent. Two years after enucleation a small growth made its appearance in the orbital cavity. The growth, as well as the other contents of the orbital cavity, including the periosteum, were immediately removed. Patient was apparently well and strong for eighteen months after second operation, when his general health began to fail, and his family physician tells me that he is now dying of cancer of the liver.

CASE XIV.—A woman, 33 years of age. Was first seen October, 1894. In this case the growth had extended beyond the eye-ball, involving not only the soft tissues, but also the bony walls of the orbital cavity. Operation was performed in this case, more for the relief of pain than for the purpose of prolonging life. All the contents of orbital cavity, together with a large portion of bony wall, were removed. Patient died three months later.

CASE XV.—Girl, 16 years of age. Came under my care November, 1894. Was suffering from tumor of eye-ball, which had already perforated the walls of the eye, and attained to such a size that the hideous appearance compelled her to seek relief by an operation. The entire contents of the orbital cavity were removed, and patient had no further trouble until nearly two years had elapsed, when the appearance of a new growth necessitated another operation. A third operation was performed in this case during the past winter, at which time a large amount of diseased bone was removed from walls of orbital cavity. Although this patient recovered from last operation, and her physical condition has considerably improved, her lease of life cannot be very long.

No one can read the histories of these cases without being impressed with the marked difference between the results following the cases operated on early in the progress of the disease, and those in which surgical interference was postponed until late in the history of the trouble. Of the eleven operated on after growth had extended beyond the eye-ball, two only are alive at the present time. Of the four in which the eye-ball was removed early in the history of the disease all are still alive, though one is reported as being in a dying condition. Of the eleven cases operated on late in the disease, all developed a secondary growth from a few months to a few years after removal of primary tumor. Of the four cases in which enucleation was resorted to before perforation of the walls of the eye-ball had taken place, three have shown no symptoms of secondary trouble. In these three cases ten, seven, and four years, respectively, have elapsed since operation. It might be urged by some that the four cases were not of as malignant a character, from the standpoint of a pathologist, as the eleven, but this is not true, for nearly all of these growths were examined by an experienced microscopist, and the most of these were found to be of the small, round, cell variety. Case No. 2 is especially interesting in this respect, as it is not only a small, round, cell sarcoma, but is also extremely deeply pigmented, such a growth as all pathologists tell us to be of a very malignant nature, yet there has been no return in this case, though ten years have elapsed since removal of eye. The more clinical experience one has with this class of cases, the more profoundly he will become convinced that the one all-important thing in the management of intraocular sarcoma is an early operation.

EXTRAUTERINE GESTATION.*

BY J. B. TEDROW, M. D.

WILLIAMS, IA.

It is entirely foreign to my purpose, at the present time, to enter into a full discussion of the many theories which have been advanced regarding this unfortunate derangement, realizing that the past few years have been very productive of a reiteration of literature and diversity of opinion upon this subject. I shall be content simply to call to mind only a few of the more salient points coming more particularly within the range of my own limited experience, embodying the dominant doctrines of to-day, together with the report of an autopsy and the description of another case.

The history of extrauterine gestation involves much uncertainty. The lapse of many dreary centuries of antiquity marks a deplorable era in the vacillating strides of medical evolution ere we have any authentic record of the recognition of this anomaly. Some few primitive obstetricians, towards the close of their career, seem to have partially adhered to the belief of its existence, but could not explain its phenomena. It was not until the process of ovulation and natural gestation, which to the ancients was very vague and incomprehensible, had become more thoroughly understood that this preternatural condition could at all be appreciated. With the slow but steady advances made in the researches of embryology and physiology began to dawn a more extensive and correct idea of this misplaced conception. And yet we find that even so recent and noted an author as Mauriceau did not hesitate to most emphatically deny the very possibility of its occurrence. Probably the earliest, most reliable writer who attempted an exhaustive, able, and intelligent exposition of the subject was Velpeau, in 1836, whose predominant views, with modifications and additions, have been largely accepted to the present time.

That this pathological condition has existed far more frequently than has hithterto been recognized seems to me to be unmistakably plausible as I read the history of medical science in the prevailing light of our present knowledge. The pathologists, surgeons, and laparotomists, by their unceasing investigations, particularly during the last quarter of a cen-

*Read before the Austin Flint Medical Society, April 6, 1897.

Digitized by Google

tury, have conclusively demonstrated the fact that many of the sudden deaths which have been attributed to peritonitis, hematocele or hematoma, or other various causes, have been nothing more nor less than undiagnosticated cases of ruptured fallopian pregnancy. Vigues and Gallard even go so far as to become extremists in their belief that every pelvic hematocele is the result of this unforeseen accident. Veit is a little more conservative in his opinion, and thinks that about four-fifths of all cases of pelvic hematocele originate from this disturbance. Formad, in his post-mortem researches during one year's active service in Philadelphia, reported twenty-seven cases that had passed through the hands of competent observers who had failed to discover their true conditions. And thus we are confronted with the terrible truths of numerous trustworthy investigators, that hundreds of autopsies have revealed the mistaken diagnoses of many able and eminent men; yet these dead-house researches are of no practical benefit to the race unless the knowledge thus acquired will enable the medical profession to more fully recognize and relieve similar conditions during life.

That this much neglected and apparently increasing malady needs more extended study and thorough investigation seems very evident; and it is with a desire to obviate, as much as possible, this lack of careful consideration, to excite a more generous spirit of diligent inquiry, and to emphasize more distinctly that these conditions do sometimes exist when we least expect them, that I have preferred to call your attention to this subject to-day, having recently passed through a peculiar experience in this regard.

However, the rarity of ectopic gestation in comparison with other morbid affections coming under the direct observation of the general practitioner is sufficient evidence of the lack of interest manifested in these cases in general practice, and should bring them entirely within the domain of the general surgeon, abdominal specialist, or gynecologist. Yet I am aware that this is not always an easy matter to accomplish. Physicians, as well as patients, have their shortcomings. The average active general practitioner of medicine is too prone to allow himself to be content with the study of cases of frequent repetition, and hence in those of rare occurrence, where Nature seems to have disregarded her own laws in deviating from her natural course, he finds no especial inspiring interest and permits his investigating energies to flag and his researches to almost entirely cease. The tendency, therefore, I think, of many physicians to-day, through unintentional lack of worthy and scientific investigation, is to hesitate too long in these cases of doubtful origin ere calling to their aid more skillful and experienced assistance to inquire into the causes of existing conditions and determine, if possible, their true pathology, and thus they augment the agonies and increase the mortality of their patients. Then again, as a rule, patients thus affected possess peculiar dispositions, and very much dislike, and sometimes absolutely refuse, as in the case I shall report, to submit to the necessary examinations and test, by a strange physician, requisite for the expression of a scientific opinion, and having an utter horror of hospital life, they will drudge along from day to day, week to week, and month to month, enduring untold anxiety, sharing at times the belief of their family physician that there is no immediate danger, no need to interfere, that Nature will assist and all will be well, until suddenly dangerous symptoms arise, the sac ruptures, alarming hemorrhage occurs, the true condition becomes known, and the patient dies; or in case death does not ensue, as may sometimes happen, places her in an almost hopeless condition so far as the prospects and benefits of future treatment are concerned.

The importance and desirability of an early recognition of extrauterine pregnancy cannot be overestimated, for in this conclusion, however difficult it may be to attain, lies the success of treatment and the hope of the patient; and I cannot well conceive of a more lamentable condition that could afflict a woman in endeavoring to exercise and effectuate that God-given function of reproduction, believing herself to be normally pregnant and cherishing the fondest aspirations that ere long she would clasp in her arms her new-born babe, to have her hopes and health suddenly blighted and be stricken violently down with the agonizing pain of collapse, and maybe death, through the inadequate comprehension of her medical attendant to grasp the situation and meet the existing emergency. It is true that during the earlier stages of ectopic pregnancy the symptomatology is so slightly different from that of normal gestation that the arriving at a positive diagnosis is fraught with difficulty of comprehension on every hand, and that even the most precautious physician, as well as patient, may sometimes be deceived thereby, for it is only when danger threatens and rupture occurs that the tocsin is sounded and the gravity of the condition realized. The symptoms, also, of other diseased conditions, such as miliary diseases of the ovaries, so closely simulate those of this lesion as to render conclusive evidence very incomplete and uncertain, and are liable to mislead even gynecologists and surgeons of recognized ability and wide experience, to whom the profession looks for unerring counsel and deliberate guidance, and hence the inability of the general practitioner to completely understand and master these intricate cases should be regarded with considerable leniency; yet there is no justifiable reason why either should stand idly by and suspend his vigil over the case until some definite conclusion has been determined.

But few men are willing to confidently assert themselves to be able to recognize this condition in its incipiency. Winckel declares that it is easier to diagnosticate extrauterine gestation than normal pregnancy, and endeavors to substantiate his claims by the report of thirteen cases wherein he says he has proved his diagnosis by necropsies or elimination of fetal structures. Now, if this skillful diagnostician was so fortunate as to be able to recognize these conditions in the beginning of their progress, has he not violated the profoundest fundamental principles of abdominal surgery, and is he not guilty of the most culpable hesitancy, in consigning his thirteen patients to the inevitable doom of non-interference, patiently

Digitized by Google

waiting for a favorable opportunity to verify his diagnoses by post-mortems or elimination of fetal bones and tissues. It seems to me that a post-mortem conclusion is not at all healthy for the patient. Alexander Skene also asserts that the diagnosis of ectopic gestation is just as possible as of normal gestation, and that one can be as sure of the presence of an ectopic pregnancy as of any of the various forms of internal disease. Byford concludes that in the majority of cases an early differentiation and corroboration of symptoms, where a complete history of the case is attainable, ought to lead to pretty definite results; yet it is noteworthy that he repudiates the vaunted easy diagnosis of some authors. But notwithstanding the sweeping assertions and immature deliberations of some few writers, when we reflect upon the invaluable contributions and recorded experiences of a Lawson Tait or a Joseph Price, together with numerous other accurate observers who stand foremost in the advancement of scientific thought in this direction, who, having had large experiences and every possible facility for study and investigation, being able to draw unmistakable deductions from their observations, and who declare that they have seen but few cases previous to rupture, and that exceptionally, if ever, these conditions could be recognized early, are we not forced to believe that the consensus of opinion is that previous to rupture an absolute diagnosis is not only attended with great difficulty, but in the majority of cases is beyond the possibility of accuracy.

Extrauterine gestation, as the term implies, may be properly defined as fecundation, implantation, and development of an ovum outside the cavity of the uterus. Authentic records declare that an impregnated ovule can attach itself only either to the lining membrane of the uterus, fallopian tubes, and Graffian follicles, or to the peritoneum, which tissues alone are possessed of the peculiar power favorable for its nourishment and development. The spermatozoa have within themselves a characteristic ciliary movement, which enables them to migrate with wonderful celerity, traversing the entire reproductive tract, fertilizing ovum at any point of contact, the site of attachment and development of the impregnated ovule giving rise to different names and varieties of pregnancy which follow. This inherent power of transmission alone makes ectopic gestation possible, for without it fertilization would never take place beyond the uterine limits.

Many varieties of extrauterine conception have been noted by different authors, but the classification given by Thomas, into tubal, interstitial, and abdominal, seems to be most generally accepted as being sufficiently comprehensive for all practical purposes, all other subdivisions being more theoretical than practical, admitting nicety of description rather than possibility of ante-mortem diagnostic distinction. The most reliable authorities now very largely, if not entirely, coincide with the views expressed in the valuable lessons taught by Lawson Tait, wherein he maintains that it is highly probable that every extrauterine fetation is of tubal origin, and that all other kinds described by various observers result from this variety and are due to change of location and adhesion to some other part, or to escape into the abdominal cavity by rupture of the fallopian tube. While, under all probability, this idea is correct, it is not at all improbable or impossible for the spermatozoa, with their remarkable migratory propensities, where the fallopian tubes have been denuded of their epithelium, to reach the fimbriated extremity, fecundate an ovum, drop into the folds of the peritoneum, find a suitable habitat, establish vascularity, and begin development in the abdominal cavity outside the fallopian tubes. However, this should be accepted with considerable hesitancy as a rare exception to the general rule, and whatever may be denominated the different ways whereby this result may be accomplished, it must be admitted that the tubal variety originally is by far the most frequent.

In perfectly healthy sexual organs extrauterine gestation is impossible. It is therefore due to some abnormal condition, generally of the fallopian tubes. A number of theories have been advanced regarding its etiology, but they are mostly conjectural, and but very little is definitely known to substantiate their claims. However, inasmuch as it is now universally conceded that fecundation may and does take place within the diseased fallopian tubes, it is reasonable to suppose that anything that would tend to form a favorable nidus for the development of the impregnated ovule and prevent its passage into the uterus would bring about this abnormality. The lining membrane of the fallopian tubes is covered with basement ciliated epithelium, having a wave-like, sweeping action towards the uterus, the object of which seems to be to pass the products of ovulation into the uterine cavity and prevent the entrance of the spermatozoa. The exfoliation of this epithelium leaving a desquamated surface for the fecundated egg to adhere to, or a narrowing of the tubal calibre by catarrhal affections, inflammatory processes, neoplasms, occlusions, and constrictions in any manner, would aid the retention of the fructified ovrum within the tube and establish for it a vicarious location, to which it may accommodate itself and begin development. Therefore, when we take into account the pathological sequences of salpingitis, pelvic peritonitis, cellulitis, ovaritis, and the periuterine inflammatory disorders, together with numerous other inflamed conditions that are liable to and do occur within and around the fallopian tubes, it is not difficult to understand how these results render those passages impervious to the fertilized ovum, and by their resultant action bring about exfetation.

Tubal pregnancy, therefore, is where the placental attachment of the developing embryo is located anywhere within the oviduct. This variety, as previously stated, is not only the most frequent, but by far the most serious, seldom reaching full term. Because of the inadaptability of the muscular structures of the fallopian tubes to sufficiently expand to meet the increasing vital necessities of the developing fetus, the walls of the tubes, from constant enervation, thinning, and over-distention, are usually forced to lacerate any time from the third to the fourteenth week and allow the contents, with hemorrhage, to escape into the folds

Digitized by Google

of the broad ligament or the peritoneal or abdominal cavity, with severe shock, which in no small amount of cases proves fatal. If at the time of rupture the ovisac is retained within the broad ligament, the hemorrhage may be slight, the immediate danger less grave, the integrity of the child not much disturbed, development may continue in rare cases to maturity, or a secondary rupture may occur, lodging the fetus in the peritoneal or abdominal cavity.

Interstitial pregnancy is where the impregnated ovule advances through the tube to its uterine attachment, separates, and works its way down between the muscular fibres, distends the parenchyma, establishing itself within the uterine walls, and continues its growth. This condition is not so frequent, less dangerous, and more liable to reach maturity than the tubal variety, but generally rupture occurs into the peritoneal or uterine cavity prior to viability.

Abdominal pregnancy is either where the germ reaches the peritoneal cavity and begins its development as before referred to, or where the ovum escapes by rupture of the cyst into the abdominal cavity, forms adhesions, and continues to live and grow. On account of the greater capacity for the expansion of the gradually increasing fetal ball over that of the tubal and interstitial varieties, this form of gestation is not as immediately dangerous, and most commonly reaches a more favorable termination, a larger percentage going to full term or even longer; yet many disastrous results follow through this extensive pathological alteration.

In either variety a perfectly developed, living child may be delivered by operative interference. The fetus may perish at any stage of its development and be successfully removed with safety to the patient, by surgical procedure or through the slow process of subsequent maceration, absorption, and elimination. Where the efforts of Nature fail to eliminate with sufficient rapidity the decomposing structures, dangerous septicemia may be produced. Where life becomes extinct the liquor amnii is sometimes absorbed, the enveloping membranes lose their vascularity and dry, wither, or shrivel up, the fetus mummifies, later on calcifies, becomes encapsuled, and may remain intact for an indefinite number of years without any serious consequences or inconvenience to the patient, save at times considerable pelvic distress from local mechanical irritation; or extensive inflammatory changes may take place, resulting in the formation of abscesses which may seek an outlet through the uterus, bladder, rectum, vagina, or abdominal walls, and eventually the discharge of the fetal bones and hardened structures. Other retrograde metamorphoses may follow, converting the fetus and surrounding structures into an encysted adipocere.

The mode of development of ectopic pregnancy is analogous to that of normal gestation, the main difference being the abnormal location of the placental attachment. We sometimes have spurious intrauterine development, producing monstrosities, so in the extrauterine variety there has been found a mole-like amorphous mass of tissue proliferation.

The mortality of all pregnancies exterior to the uterus is very large, about four-fifths ending unfavorably. Death results from loss of blood at time of rupture, acute peritonitis, shock, or septic infection from degenerative processes, producing protracted invalidism and finally demise.

With a slight variance of signs in the different varieties, the usual array of symptoms, in connection with those accompanying normal pregnancy, which are to guide the physician in the attainment of his diagnosis may be briefly stated about as follows: Suppression of menses may but does not always occur; regular menstruation is replaced about the sixth or eighth week with peculiar irregular, painful periods; the flow assumes a sero-sanguinolent character of considerable persistency; decidual shreds or casts are expelled, which, upon examination, contain no fetal villosities; the uterine hemorrhages are sometimes copious, then again moderate, coming on suddenly in spurts or gushes, then disappearing and returning without any definite arrangement of time, order, or duration, having every appearance of approaching abortion; sharp, darting iliac pains, extending down the thighs, occasion much distress; vesical irritation from pressure causes frequent micturition; there are lancinating, paroxysmal, cramp-like, colicky pelvic pains, located in the region of the fruit sac; the abdominal walls are extremely sensitive to touch, especially immediately over the tumor; there is much pelvic discomfort; the uterus is sometimes displaced, somewhat enlarged, generally high up in the pelvis, cavity empty, cervix rigid and filled with mucus; a soft, boggy, fluctuating, tender mass may be felt per vagina on either side or behind the uterus, which, as it enlarges, produces uncomfortable pressure; the vaginal tissues are highly sensitive from increased hyperemia, which produces a purple or violet hue; frequent recurrent attacks of pelvic peritonitis occur without any assignable cause; the patient becomes irritable and very hard to please; a long period of sterility most always precedes; when rupture takes place into the peritoneal or abdominal cavity there is an abrupt, agonizing pain at point of laceration, severe uterine and internal hemorrhage, complete lassitude, pulse weak and rapid, respiration sighing, temperature subnormal, extremities cold, face pale and bathed in cold perspiration, and death speedily ensues unless the abdominal cavity is quickly opened and the bleeding vessels ligatured.

In regard to treatment there seems to prevail a diversity of opinion bordering upon wide extremes, but it seems to me that the weight of convincing evidence is year by year favoring abdominal section. I fail to find recorded what I would term very brilliant results from the destruction of the fetus by morphine injections into or the withdrawal of the amniotic fluid from the sac. Most generally there is, sooner or later, serious after-trouble. Electrical feticide has also been practiced with somewhat more favorable results, but to me it is of questionable utility in these days of progressive abdominal surgery. In suspicious cases, where a diagnosis cannot be determined with any degree of certainty, electricity may possibly with propriety be applied. It should not be resorted to in any

Digitized by Google

stage of advancement after rupture and hemorrhage have occurred. Its sphere of usefulness is indicated, if at all, only prior to the twelfth week. Its application is not entirely devoid of danger, as it produces muscular contractions, enhancing rupture, exciting hemorrhage, and does not in any way provide for the liability of subsequent trouble from suppuration. I believe it to be good, sound surgical judgment to extirpate, in any stage, the offending cause, as soon as the diagnosis becomes clear and unmistakable, by the safest and best known means at our command, which I strongly advocate to be laparotomy, and not wait for the developing of deleterious or untoward effects, which it should be our most ambitious desires to prevent. When delay, with all its possible concomitant evils, threatens in the end to become more dangerous than immediate operative interference, why longer imperil the lives of these unfortunate women with a timidity and procrastination that savors of the infancy of our art and science, and should be intolerable in the present light of medical triumph? Where viability has been reached previous to diagnosis, with no aggravating symptoms, in the hope of saving the child it might be justifiable to wait, with constant vigilance, being ready at any moment to meet any emergency that would be liable to arise, but in any stage of development, where the symptoms are distressing, or where a dead fetus is known to exist, abdominal section should without hesitation be performed.

I now desire to report the following cases:

CASE I.—During the summer of 1885, one year prior to my graduation in medicine, I was spending my vacation with my former preceptor, in Western Pennsylvania. He was a man of rare talent, large experience, and high repute, having practiced medicine for twenty-three years. One night we were hurriedly called five miles into the country to see a patient whom the messenger said had taken sick momentarily and was suffering intensely. Upon arrival we found a woman lying on the floor on her back, with her knees drawn up, screaming in terrible agony and complaining of excruciating pain in the lower part of the abdomen. She had gotten out of bed to use the commode, was taken with severe pelvic pains, had fallen to the floor, and her husband, being alone, was not able to get her back to bed. She was lying in a pool of blood and her clothes were thoroughly saturated. Her pulse was almost imperceptible, respiration sighing, face pale and bathed in cold perspiration, with an indescribable expression. Extremities cold, heartbeat 170. She was a very intelligent woman and well knew her danger. She whispered she was having a miscarriage, that something had burst inside and she could feel she was bleeding to death and knew she would die. We administered anodynes, hemostatics, saline solutions, and tamponed the vagina, from which came great rushes of blood; applied heat to the extremities; lifted her upon her bed and endeavored to meet the emergency as best we could, but all to no avail. The abdomen became widely distended, showing free internal hemorrhage, and she continued to grow weaker and weaker and died thirty-five minutes after our arrival, which, as near as we could determine, was about two hours from the time the accident happened. My preceptor, I dare say, was as badly scared as myself. He could not see how a miscarriage could produce such fearful abdominal hemorrhage. Some other condition, he reasoned, must be the cause. Yet he never even suspicioned tubal pregnancy. He was suffering from blood-poison on his right hand and requested me to hold a post-mortem. Accordingly the next morning, under his direct supervision, I opened the abdominal cavity, from which we removed an almost incredulous amount of blood clots, showing very profuse hemorrhage. We found the left fallopian tube ruptured near its middle portion, and hanging down from it by placental attachment was a fetus which we thought was about three months developed. I cut off the fallopian tube near its uterine attachment and removed tube, fetus, and ovary together, which specimen was preserved in the doctor's office. The right ovary and tube seemed healthy. The uterus was considerably enlarged and the inside covered with deciduous membrane. No other abnormalities were noticed. The history elicited from her husband was not very satisfactory and my notes are incomplete. She was 36 years of age; married when 22; had three children, ages 12, 9, and 6 years. Her labors were natural; had one miscarriage, five years before her death. Had always enjoyed exceptionally good health until the last year. She was annoyed with considerable amenorrhea and irregular menstruation; complained a great deal of uterine colic. She believed herself to be normally pregnant and having a miscarriage at the time of her death, and when she went to bed in the evening was as well as usual.

CASE II.—Mrs. M. has been under my professional observation for ten years. Prior to two years ago she enjoyed comparatively good health. Age 37; menstruated at 14; married at 20. Had one child, who is now 13. Childbirth easy and normal. Enjoyed conjugal relations with her first husband only a short time. Ten years after her first marriage, or seven years ago, she was married to her present husband, from which union no children have been born. Five years ago had a miscarriage. Three years ago is supposed to have had another miscarriage, but this is not certain, as no fetus was discovered. Menstruation previous to two years ago was regular and normal; since then very irregular and painful, at times confining her to her bed for two or three days during periods. Sometimes the flow was excessive, then again scanty, more distress accompanying the former than the latter condition. Amenorrhea very troublesome. In September, 1895, she was not feeling well; had missed one menstrual period; was having considerable gastric disturbance, and concluded to take a trip to Kentucky, her former home. While away she had two severe flowing spells, about two weeks apart, attended with sharp pains in the left side, different from anything she had ever experienced. She returned home the middle of October following, feeling somewhat improved in health and having symptoms of pregnancy. Two weeks later she had a similar, but not so severe an attack of flowing, with a "tearing pain," as she expressed it, in the region of the left

Digitized by Google

ovary. She recovered in a few days and continued to feel quite well, and every symptom of normal gestation became apparent. On the 15th day of January, 1896, she took suddenly ill with severe cramps and spasmodic pelvic pains, mostly in the left side, with profuse gushes of blood from the uterus, the pain being so severe that even the most heroic doses of anodynes failed to relieve her, suffering intensity of torment I had never before witnessed for at least five hours, when she began to get ease and slept for eight hours. Aroused comfortable. Had no more sharp pains, but the vaginal tissues and abdominal walls remained extremely sensitive to touch. She was confined to her bed for three weeks. Had it not been for her previous similar, but less severe attacks, I would have been led to believe she was having a miscarriage. As it was, I confess I could not at the time understand the true pathology. With the hemorrhage there passed shreds or stringy, deciduous-like tissue. When she recovered a marked fullness in the left side was discovered, which was not noticeable before, and upon pressure a tumor-like condition was discernible. She continued to develop as if normally pregnant, the abdomen enlarging, hips widening, breasts developing and secreting milk, fetal movement becoming more and more marked, and her weight and size increased so that she could not wear her former clothes. Menses did not cease, but became more irregular and painful, varying from two to six weeks, the flow being light-colored, or watery-like at first, followed by gushes of blood at irregular intervals, containing stringy, pus-like tissue having quite an offensive odor. The length of monthlies was indefinite, sometimes ceasing in one day, other times lasting a week. Severe shooting pains down the thighs gave much annoyance. I could not hear at any time the fetal heart-beat, nor outline the fetal form; yet she insisted motion became stronger and that she would have a baby, having prepared for it an extensive wardrobe. Everything moved along without particular incident, with the exception of considerable pelvic discomfort, appetite good, system well nourished, until the following June, when I concluded that her time to be confined ought to be up if she was normally pregnant, and requested a vaginal examination, against which she strenuously protested, feeling confident she was all right and preferred to be let alone. About a month later I again visited the patient, who was feeling quite well, expecting any moment to be confined, having occasional bearing down pains, with slight hemorrhage, and who now consented to an examination. Upon investigation I found the uterus high, movable, slightly enlarged, cervix open and filled with mucus, a peculiar swelling or enlargement posterior and to the left side of uterus, which seemed to pulsate or fluctuate, and the pressure of which produced a moderate degree of retroversion. The vaginal tissues were purple and highly sensitive. Bimanual examination was not very satisfactory, as she could endure but slight pressure upon the abdomen. A lump could be felt in the left side about as large or probably larger than two fists, extending diagonally across the abdomen, slightly movable from side to side, and having a motion observable both to sight and touch. She refused to take an anesthetic or allow a uterine probe to be passed. Pulse 80, temperature normal. Bowels regular. Slight vesical irritation. I then for the first time suspicioned and pronounced the case tubal pregnancy and asked for counsel, which was refused, it being impossible to impress upon the woman's mind that such a thing could possibly exist, and in the height of indignation at such a supposition she vehemently declared that she ought to know whether or not she was normally pregnant. She ruled the hour. Time went on until the latter part of July, when I was hurriedly sent for and found her in bed with terrible pelvic pains, severe uterine hemorrhages, lively movement in abdomen, all of which subsided in about eight hours, but left her sore and exhausted and necessitated her staying in bed for seven days. I again examined her, with same result as before, and urged consultation for further investigation, which was again refused, still believing she would give birth to a child. But pretty soon she begins to realize a change in her entire train of symptoms. Development ceases, tumor becomes smaller, symptoms of pregnancy less marked, mammary secretion disappears, the strong abdominal movements stop, and a quivering sensation is experienced, loss of flesh and general decline take place. And thus have I watched a degenerating process go on within her, with no serious symptoms, for six months, up to January, 1897, when I finally got permission to call in consultation Dr. Symington, of Ackley, to see her. She was not in bad health, but felt somewhat depressed. Her symptoms had entirely changed and the tumor or lump in the side had decreased in size about two-thirds. The doctor thoroughly examined her, but could not account for all her previous symptoms, and hence did not at the time commit himself as to diagnosis, but thought that inasmuch as she did not seem to be in an immediately dangerous condition, better let her alone. But she became irritable and apprehensive, fearing ultimate blood poisoning, and Dr. Belle Conrad, of Webster City, was called shortly afterwards to see her, who shared fully with me my belief that a degenerating tubal pregnancy existed, and that Nature, unassisted, would probably conduct the case to a favorable termination. However, we recommended that she go to Chicago for further examination, and treatment, if necessary, and she entered the Presbyterian Hospital a few days later. Dr. Ethridge hastily examined her and diagnosed fibroma, and recommended hysterectomy. Dr. Senn could not find any fibroids. He examined her carefully four different days, the last time under the influence of an anesthetic, at which investigation I was present, and he was more reserved about his diagnosis. He said he would keep the patient under observation for a short time, then write me his diagnosis and treatment, which he did, as follows: "I found a small retention cyst under the mucous membrane of the anterior lip of the cervix. The uterus was somewhat enlarged and retroverted, also slightly adherent. I removed cyst and reduced the uterus. From the history of the case I believe she must have had tubal pregnancy, rupture of sac, and subsequent absorption of contents and ex-

Digitized by Google

travasated blood." Patient remained in the hospital five weeks, returning home March 20, feeling somewhat better, but not well, and since then she has been up and down about as usual.

To summarize, I wish to say that in my opinion, as I now look back over the case, that this woman conceived a tubal pregnancy early in August, 1895, and that the three severe spells she had during September and October following were attempts of Nature to relieve the tube of the misplaced product of conception, in her unsuccessful efforts to produce tubal abortion. The fourth attempt, January 15, 1896, the tube ruptured and the ovum, with slight hemorrhage, was forced into the folds of the broad ligament. The integrity of the ovum was not entirely destroyed, probably partially dwarfed, and it continued to survive until her July spell of sickness, when it ceased to exist and began the process of degeneration and absorption, which retrograde change has been going on ever since, and which is not yet complete, but which I believe to be one of those rare cases where Nature will carry to recovery.

PAROXYSMAL TACHYCARDIA AS A MENSTRUAL CONCOMITANT.*

BY I. N. PICKETT, M. D.,

ODELL, NEB.

Hannah J., of Nelson, Neb., age 16, of Danish parentage, a blond, rosy-cheeked girl with good appetite and digestion, but slightly constipated, applied for treatment May 1, 1895, for "monthly sickness." She gave a history of good health until nine years of age. In 1891 she had la grippe, from which she speedily and fully recovered. She knows nothing of her father, except that he is living. Her mother died suddenly while pregnant eleven years ago. From the girl's statement I believed at the time that her mother was an epileptic, but recent and more definite information on this point leads me to believe the cause of death was puerperal eclampsia. The girl was the youngest of four children, the two brothers and one sister being adults, each with a history of perfect health from childhood until the present time. At nine years of age the present trouble first made its appearance. The paroxysms recurred at irregular intervals until menstruation was established, when they assumed the periodicity of and either preceded a few days, accompanied the flow, or followed this function in less than a week. The first menstruation occurred in January, 1894, and was regular until the following August, when she missed two months, menstruating again in November, since which time the menses have appeared regularly. There is some pain (which of itself is insignificant) about twenty-four hours before the flow begins, this pain disappearing when the flow is established. The flow is scant, as she "seldom finds it necessary to use a napkin." At each menstrual period, either a few days before, during the flow, or sometimes—though seldom so long as a week—after, she is suddenly seized, while walking, sitting, standing, at work or at rest, and, at the beginning of the disease more frequently, though now less often, when asleep, with a "fluttering in the region of the heart," breathlessness, a throbbing, roaring noise, headache, dizziness, and faintness, nausea, soon followed by vomiting. There are flashes of light before the eyes, and a sensation of heat over surface of the body. The subjective symptoms are cyanosis of the face, trunk, and limbs, accelerated and at times sighing respirations. The surface of the entire body is cold to the touch. Extreme rapidity of the heart's action, from 180 up until the pulse, which seemed to be regular, was lost in a "flutter" or vibration. The heart murmurs were so altered in time and quality that I could not recognize either the first or second sound. These symptoms would last from two to twelve hours, when, with the suddenness of their onset, to use her own description, "something catches my breath, there is some pain in the region of the heart, which seems to stop beating; there is a distressing fullness of the head. These last for a moment, when I drop into a quiet, refreshing sleep, to awaken feeling somewhat fatigued, but otherwise fully restored."

While the case was under my observation these symptoms would appear at each menstruation, and in the order here given. During the intermenstrual period her health was considered perfect. No hysteria or neurasthenia.

A physical examination of the pelvic organs revealed nothing to support the idea that the cause would be found in either the ovaries or uterus. My diagnosis was paroxysmal tachycardia, due to a "nervous explosion" of an epileptic nature, involving the cardiac centers, and connected in some manner with the menstrual function. Bromides, antispasmodics, and digitalis had no effect. Tinct. veratrum viride, in doses of five to ten drops every half hour until emesis was secured, promised for a time to be of service, as the last paroxysm I saw her in two doses had controlled the erratic, runaway heart, and she was elated over the result.

At this time I lost sight of the case, until a few weeks ago I received a letter from her stating that this agent now fails to relieve her, and that the symptoms have returned with increased severity, and with the additional information that the paroxysms have lost their former periodicity and are now liable to occur at any moment, irrespective of time or condition.

Ice cold water does not control, but seems to be the most efficient agent in mitigating the severity of the paroxysms. Hot coffee seems to influence the violent heart's action favorably, but it increases the cerebral distress.

The word tachycardia is derived, as you know, from two Greek words: Tachys, meaning quick, and cardia, heart. Quick heart or heart hurry of some authors. From the strict derivation of the term it could be applied to any rapid action of the heart. But H. C. Wood, who was the first to name this perplexing cardiac disturbance, restricts the use of the term, and in his article in the University Medical Magazine defines the disease to be "a recurrent paroxysmal neurosis, in which attacks of excessively rapid action of the heart occur without obvious, immediate, or predisposing

*Read before the Nebraska State Medical Society, Lincoln, May 19, 1887.

Digitized by Google

cause, and without pronounced pain or excessive cardiac distress." Osler says: "It is a remarkable affection, characterized by spells of heart hurry, during which the action is greatly increased, the pulse reaching 200 and over," and that "the cases are not common."

If we accept the above definition, we must exclude rapid action of the heart associated with organic cardiac disease, such as valvular lesions. It also excludes sensory affections, such as angina pectoris, or any pronounced painful condition in the cardiac region, inflammatory and febrile excitation, exophthalmic goiter, and all general constitutional disturbance. This leaves us with purely a cardiac motor disturbance, which arises with the rapidity of a tempest, and Wood very appropriately designates it "a cardiac nerve storm," and suggests that "the paroxysms are caused by discharging lesions affecting the centers of the accelerator nerve." This, so far as I can learn, is the generally accepted theory in preference to the views of some writers that the cause is a temporary inhibitory paralysis.

It may here conduce to a better understanding of this strange and complex condition if we briefly touch upon the physiological aspect of the cardiac impulse, and recall to our minds a few of the fundamental principles governing the tissues here involved, muscle and nerve tissue, the heart muscle, and the augmentor nerve. And without entering into the histology of these structures, it will suffice to say that the muscular tissue of the heart belongs to the involuntary class of contracted tissue, and that it is less highly specialized than the skeletal muscle. The striation is more obscure, the differentiations less complete, and it resembles more nearly the primordial protoplasm, an attribute of which Foster says is automatic or spontaneous movement, and this is important to bear in mind when considering the origin of the cardiac impulse. The cardiac muscle, like the skeletal, is irritable, but, unlike the latter, the response or contraction following an impulse is not in proportion to the stimulation. There is either a strong contraction or none at all. Another marked difference is that it is almost impossible to produce a tetanic contraction of the heart muscle. The accelerator nerve belongs to the splanchnic system, and its fibers are traced to the inferior cervical ganglion of the sympathetic. This nerve, like the muscle and all nerve tissue, is endowed with an inherent irritability, but, unlike its antagonist, the inhibitory, it is composed of non-medullated fibers, and still unlike other efferent nerves, does not possess trophic influences. Its function seems to be purely the transmission of motor impulses. And while it possesses the fundamental attribute common to all nerve tissue, irritability, a stronger stimulant is required to produce an effect, a longer time is occupied in the transmission of impulses, and it is less easily exhausted than the inhibitory nerve.

For the sake of brevity we omit the consideration of the origin of impulses by submitting a few propositions, embracing the fundamental principles involved in this subject.

First—Both muscle and nerve possess irritability which is inherent.

Second—Muscular action in general, but the cardiac less so, is dependent upon nervous impulses which have their origin in the central sensory organs and gray cells.

Third—A nervous impulse is generated when there is a change from a phase of a lower to one of higher irritability.

Fourth—The influence which brings about abnormal and excessive muscular action is a stimulant, which is excessive. These propositions, I believe, will apply to all abnormal muscular action, as well as the subject under consideration. They also make clearer, if not wholly account for, that condition we often hear and some writers designate as functional disorders. Paroxysmal tachycardia is classed a functional neurosis, but the abnormal, rapid action of the heart is the result of an excessive stimulation of the augmentor nerve supplying this organ. This nerve, as a result of setting free of an abnormal amount of nerve energy ("discharging lesions" of Wood) in some part of the nervous system, is in a catelectrotonic condition; that is, there is a sudden change from a phase of lower (or normal) to one of higher (or abnormal) irritability, and the accelerator center is hyper-responsive to emotional impressions and reflex impulses.

There is one other point in connection with the heart's action to which I wish to call your attention before leaving this subject. I refer to the phases of the cardiac cycle. We find that while the sinus, auricle, and ventricle possess the power of automatic contraction, they do not possess the same degree of irritability, and that while the heart's action is in some way more or less controlled by nervous influences, the rate and force of the beat depend quite largely on the impulses sent to it over certain nerve fibers. You remember that the contraction begins in the sinus venosus (which, Foster asserts, "possesses a higher rhythmic potentiality") passes to the auricle (being next in degree of irritability), and lastly to the systole, is completed with the ventricular contraction. The diastole now begins, this period of rest or dilation occupying more time than the contraction. Foster approximates the duration of the different phases of a normal heart beating seventy-two times per minute as follows: "Systole of the ventricle, before the opening of the semi-lunar valves, 0.1 second; escape of blood into aorta, 0.1 second; continued contraction of the empty ventricle, 0.1 second; total systole of the ventricle, 0.3 second; diastole of the ventricle, including relaxation and filling up to the beginning of the ventricle systole, 0.5 second; total cardiac cycle, 0.8 second." The same author asserts that "in a rapidly beating heart it is the pauses (which in normal beat occupy about 54 to 60 per cent. of the cardiac cycle) which are shortened, and not the actual duration of the beat." If impulses are transmitted over nerve fibers, that are distributed to the parts possessing the "higher rhythmic potentiality" the rate of the beat will be most markedly influenced by shortening the pause of the cycle, and the force of the beat will be but little changed.

Digitized by Google

In 1879 Francois Frank, in a series of lectures, asserted that "any great increase in the heart action, not accompanied with an increase in the arterial pressure is primarily due to a shortening of the diastole, and that during the heart's systolic contraction so little blood is expelled that the average amount is not increased." And I believe that the cyanosis in the above case may rationally be accounted for upon the hypothesis that it is a venous stasis, as a result of a diminished amount of blood being delivered at the systolic contraction. As to the cause of this sudden setting free of nerve energy, Whittier, in the Annuals of the Universal Medical Sciences for 1892, states that little is known. Sexes are equally affected, and the attacks begin between forty and fifty years of age. There is seldom nervous heredity, no hysteria or neurasthenia, but it is admitted that it may be a manifestation of epilepsy.

Huchard, in commenting upon a case reported by Talamon, which seemed to be of a traumatic nature, "was disinclined to admit the epileptic origin of tachycardia, inasmuch as the latter was a disease of advanced age, while epilepsy always began in young subjects." Whatever be the origin of this disease, whether it is a local manifestation of a general neurosis, a cortical epilepsy, hysteria, or neurasthenia, I believe that the above case answers Huchard's objection, and that tachycardia is not always a disease of advanced age.

The pathology is equally obscure, necropsies revealing nothing, and most of the theories thus far advanced have been found untenable. The most rational and generally accepted is that it is a "discharging lesion" involving the accelerator fibers of the sympathetic. The prognosis is doubtful. Wood claims that "the disease has no apparent tendency to shorten life or develop organic disease." Courtois-Suffit, of Paris (Annuals of the Universal Medical Sciences, 1892), insists that "whatever the cause, essential paroxysmal tachycardia is a grave affliction." Bouveret reported eleven cases, one of which was cured. The mode of death is by syncope. The result of a search through the limited literature at my command for treatment may be summed up in the one word, unsatisfactory. The administration of one remedy may for a time promise success, but there is generally a relapse sooner or later to the former course of the disease. The nature of the disease seems to be relentless and progressive. Each case is a law unto itself with regard to progress or susceptibility to influences which bring about the essential discharge of abnormal nerve energy. The special points of interest to me are, first, I believe the above case is a typical one of essential paroxysmal tachycardia, which, as Osler says, is uncommon; second, that it is the earliest age at which this trouble has been found or reported; third, that from the age of nine the disease pursued an irregular and indefinite course until puberty, when for a period of more than two years it was a menstrual concomitant, but of late the intermenstrual period seems to be no bar against the paroxysms of heart hurry.

ONLY 100 cents for the REVIEW a year.

GRAFTING OF TENDONS FOR PARALYTIC DEFORMITIES, WITH REPORT OF A CASE.

BY CHARLES C. ALLISON, M. D.,

OMAHA, NEB.,

PROFESSOR OF SURGICAL ANATOMY, RECTAL AND GENITO-URINARY SURGERY, OMAHA MEDICAL COLLEGE; SURGEON TO THE PRESBYTERIAN HOSPITAL, ETC.

F. L., age 19, was operated upon March 16, 1897. The deformity—equine varus—was of paralytic origin, the poliomyelitis supervening upon an attack of measles and catarrhal pneumonia at the age of one and a half years. All the muscles of the anterior tibial group were paralytic except the extensor longus hallucis, there being no power of extension of the foot nor of any of the toes, except in the great toe, and this one, from the long continued action of the hyperdeveloped extensor longus hallucis, was retracted and extended in a marked degree, causing the added deformity of "hammer toe." At the age of twelve years a tenotomy of the tendo achillis was performed, with temporary benefit. When seen by me in March, 1897, the foot was flexed upon the leg at an angle of 40 degrees, the weight of the body being sustained by the distal extremities of the metatorsal bones. A tenotomy of the tendo achillis was done, the foot was reduced to as near a right-angled position as possible, and to counteract its recontraction and to gain power of extension a tendon grafting was undertaken. A median incision above the annular ligament, two and a half inches in length, exposed the extensor hallucis and extensor communis digitorum tendons. Division of their adjacent sheaths was followed by lifting a graft from the outer side of the extensor hallucis, with its distal extremity free, while a corresponding graft was raised from the inner surface of the extensor longus digitorum, its proximal extremity being free. Their grafts were then apposed by means of chromicised gut and the sheaths of their respective tendons brought together over this union to prevent adhesion during repair. The fascia and skin were then united without drainage and a plaster dressing applied, with the foot at right angles with the leg. At the end of a week and a half the plaster was removed and power of extension was plainly evident in the toes and foot. Under massage and use the range of motion is gaining, and additional power of extension has followed the use of graduated corks inserted into a transverse arc cut in the plaster over the convexity of the heel. This patient now walks upon the sole of the foot and he has voluntary extension of foot to right angles, a gain of 50 degrees in position, due to a transfer of the power of the hypertrophied tendon of the great toe to the common tendon of all the toes.

The earliest literature upon this subject is an article by Dr. B. F. Parrish, in the New York Medical Journal under date of October 8, 1892. In this contribution, with the title, "A New Operation for Tolipes Valgus, and the Enunciation of a New Surgical Principle," the author says: "The important principle of grafting tendons and having a live muscle do the work of a dead one is that which I wish particularly to establish in this article." Dr. Parrish's case and a similar one

Digitized by Google

by Dr. A. M. Phelps were exhibited at the orthopedic section of the Academy of Medicine shortly afterwards.

In the Medical Record of October 26, 1895, Dr. S. E. Milliken, then of New York city, reported a case of successful tendon grafting in a paralytic equine valgus, and a second report by the same author in the Medical Record of November 28, 1896, includes nine cases treated on this principle, with satisfactory results. The technique of the latter operation differing from that of Dr. Parrish, in that Dr. Milliken uses distinct flaps, while Dr. Parrish merely "freshened the opposing tendon surfaces."

Experience demonstrates that:

First—A healthy tendon may be grafted into one that is paralytic, with the result of giving power to the dead tendon.

Second—That the principle of implantation of tendons may be utilized in any part of the body so long as the live tendon has proper origin and nerve supply.

Third—That massage and use supplement this operative treatment.

Fourth—That the most gratifying results will be obtained in comparatively recent cases.

PREVENTION OF TUBERCULOSIS.

By J. M. EMMERT, M. D.,

ATLANTIC, IA.,

PRESIDENT IOWA STATE BOARD OF HEALTH.

Can tuberculosis be prevented? is one of the most important questions of the day. Sanitarians, physicians, and other scientists are not alone interested in this question, but it is of vital interest to every father and mother, brother and sister.

When we remember that the "Great White Plague" is the cause of every seventh death; that in the state of Iowa nine persons die of tuberculosis every day, three thousand every year; that the United States contribute every year 150,000, and the world 5,000,000, I say, when these facts confront us it is no wonder that the people are asking what can be done to prevent this disease. All infectious and contagious diseases are preventable to a certain extent, and among the list there is none that has received so much patient scientific study and investigation as that of tuberculosis, and to-day there is no disease in the infectious and contagious list that we so thoroughly understand the natural history of the germ causing the disease, its modes of growth, products of growth, its climatic distribution and modes of infection.

Notwithstanding the accumulated knowledge upon this subject and our thorough understanding of the disease, we have made but little advancement toward preventing or stamping out the disease.

Our boasted knowledge of the cause of the disease is of little use to humanity if we do not use it in applying preventive measures.

The disease can be prevented to such an extent that many valuable lives may be saved by obeying certain hygienic and sanitary laws, thereby rendering persons less susceptible to the disease and removing the cause, which consists in destroying the pathogenic germs.

Hereditary transmission is now looked upon as very doubtful, if not impossible, but there is inherited a condition that predisposes the person to the disease, a condition that makes of the system a suitable culture by inviting the disease and making it dangerous for the person to breathe air but slightly contaminated with the poison, and for even a few minutes.

This class of persons can do much in avoiding the disease and live long and healthy lives by giving special attention to personal hygiene.

The most important factor in preventing the disease in predisposed persons is that of fresh air and sunlight. God has given man no better disinfectant or disease destroyer than these two universal elements. The person should live in the fresh air and sunshine as much as possible. Dr. Trudeau, of Baltimore, in a paper before the American Climatic Association, very truthfully says: "All means which tend to increase the vitality of the body cells have been found to be precisely those which are most effectual in combating tuberculosis; one by one specific methods of treatment, which for a season enjoyed popularity, have fallen into disuse, and hygienic, climatic, and feeding—in other words, a favorable environment—have alone given results which have stood the test of time." The home should be high and dry, no damp cellars, no leaky sewer pipes or cesspools or filth piles should be tolerated; the sleeping room should be well ventilated and living rooms the same; all indulgence in alcoholic liquors, tobacco, over-eating, worry, anxiety, and mental strain should be avoided. All these lower the vitality, and consequently the personal resistance.

The methods of infection are almost entirely confined to two sources: from tuberculous animals to man, and from one human to another. There are two principal channels by which the germs get into the system, the lungs and stomach. Although direct inoculation by way of denuded surfaces may, and often does take place, as in operation and post mortem wounds, it has been abundantly proven that eating uncooked or partially cooked tuberculous meat, and drinking milk containing the tuberculous bacilli, will produce tuberculosis in the human being.

To avoid the danger of infection from meat and milk there should be a most rigid system of inspection of all cattle for food and milk supply in each county. This should apply not only to the larger towns and cities, but to the villages as well, with supervision over all farm stock. Literature should be distributed among the dairymen and farmers, instructing them how to house, feed, and care for their cattle to prevent tuberculosis; they should also be instructed how to use the tuberculin test, and how to treat all suspected animals. In by far the largest number of cases, tuberculosis has been caused by the disease in some other human being. If we ever succeed in preventing tuberculosis, it will have to be along the line of personal and legal control of those already infected. This may not necessarily mean strict quarantine, but it does mean an abridgment of personal liberties, a medical or legal supervision of action, with entire control of all excretions from lungs and bowels.

Digitized by Google

Every case of pulmonary tuberculosis is a walking culture bed, sowing seed broadcast; he is a wholesale dealer in his particular line of living germs; he is a living example of the parable of the sower: "A sower went forth to sow his seed, and as he sowed, some fell by the wayside, and others fell on good ground, and it sprang forth and bore fruit an hundred-fold." Unfortunately for the human family, many fall on good ground and keep up the fearful mortality stated in the beginning of this paper. There is no longer any doubt as to the correctness of Koch's theory; the germ has been isolated and injected into animals, producing this disease, demonstrating that the bacillus is the cause of the disease.

But of as much, if not more, interest to us is the fact that the sputa of a pulmonary tuberculous patient is loaded with these germs, and that this sputa fed to animals or injected into them will produce the disease. It has also been proven by scientific investigation and demonstrated that these germs will maintain their vitality for months in a dry state, floating in the air, to be carried into the lungs of the unsuspecting victim.

Some authors go so far as to say that 90 per cent. of cases are produced by inhaled germs thrown off in the sputa of an infected person. If these statements are true, and I believe they are, how necessary it is to prevent the spitting by tuberculous persons upon the streets, in stores, hotels, depots, railway cars, in fact, anywhere and everywhere, except a receiving vessel, containing a strong antiseptic solution, or in cloths or other materials that can be burned at once.

The promiscuous spitting of tuberculous matter is not only spreading the disease throughout the inhabited globe, but is making a pest-house out of some of the most healthful parts of the country, but unfortunately used for health resorts for these patients.

The Denver Medical Times says: "It was some time ago intimated in an eastern paper that the streets and walks of Denver were covered with the sputa of consumptives. The statement was not far from the truth. Unless very rigid measures for the prevention of the spread of consumption in Colorado are adopted and put in force, Colorado will become a pest-hole." The Pacific Medical Journal, recognizing the danger, insists upon stringent measures being adopted to stop expectoration upon and about public places. The inhabitants of Los Angeles have become aroused to the danger of indiscriminate mingling of consumptives with healthy persons, and the board of health of this city has passed an ordinance against expectorating upon the streets and in public places. San Francisco has passed the same kind of an ordinance, which, so far, has been impracticable. While the people are not ready to endorse and give their moral support to the enforcement of a street quarantine law, a law can be so drawn as to have the endorsement of the best people in every community; such a law should require the placarding the premises to warn the predisposed from entering, to require the sputa to be received in cloths and upon paper, and immediately burned. The first law of Nature, self-preservation, would demand at least this much. The patient should not be allowed to attend large gatherings, especially in closed rooms containing children. They should be allowed to travel the streets, walks, and roadways only when they carry receiving vessels for the sputa, and a fine should be attached for expectorating, except in this vessel, while absent from the house. The eminent sanitarian, Henry B. Baker, secretary of the Michigan State Board of Health, advises small pieces of cloths, each large enough to receive one sputum, and parafined paper envelopes or wrappers, in which the cloth, as soon as once used, may be put and securely enclosed, and, with its envelope, burned on the first opportunity.

Dr. George Casnet, of the Berlin Hygienic Institute, with the dust gathered from the walls of rooms inhabited by tuberculous persons, and not contaminated directly with the sputum, has, upon being mixed with sterilized bouillon and then injected into the peritoneal cavity of guinea pigs, produced tuberculosis. Twenty-one hospital wards were examined in the same way, and the dust from fifteen of them produced tuberculosis. This admonishes us that thorough disinfection of all buildings, rooms, and wards where persons have died of tuberculosis should be had, and that all sick rooms should be ventilated as thoroughly and as often as possible, as well as occasionally washing down the walls with a disinfectant, and then whitewashed, which also should contain some disinfectant not injurious when inhaled. There is another sower that has attracted some attention lately, and will more in the future; that is, the railway coach, and especially the elegant Pullman cars; they are veritable "whited sepulchers, which indeed appear beautiful outwardly, but within are full of dead men's bones, and of all uncleanliness." With all its magnificent settings, rich tapestries, and beautiful velvet curtains, it is a modern death-trap of the worst kind. Think of being closed up in a room forty feet long and ten feet wide, containing probably forty persons, among them two or three consumptives, without any ventilation, except when the doors are opened, and then for a moment, filled with hangings and velvet-colored seats that had accommodated probably hundreds of tuberculous and other diseased persons, with only an occasional dusting, which only brought out the germs that had hidden in the dead recesses of the velvet folds, as ashamed to look a poor mortal in the eye because he had no chance for his life. But this will all be corrected in the future.

The votaries of sanitary science, and those who love their fellow-men, like Abou Ben Adhem, will rise up and demand that a sanitary car be built that will reduce the dangers of disease to a minimum. The law should demand that every trunk line running through trains should carry a hospital car, not only for the protection of the well, but for the comfort of the sick. The closets upon cars should be so arranged that the dejecta could be received into a strong disinfectant before being thrown to the ground. It has been proven that the dejecta, both urine and fecal matter, contain millions of germs, and these germs are now being dropped all over this country, to be dried and scattered to the four winds of heaven.

I have, in a very brief and disconnected manner, pointed out a few of the important measures for arresting tuberculosis, and firmly believe that if they, as

Digitized by Google

well as others, could be enacted into laws, the mortality from tuberculosis in the future would decline in a direct ratio to the enforcement of said laws.

THE BONE OF CONTENTION IN RAILWAY SURGERY.*

BY ROBERT McCONAUGHY, M. D.,

YORK, NEB.

The bone of contention in railway surgery is not a contention between railway companies and the general public as to whether there are any serious spinal injuries, but a contention as to what constitutes a serious injury.

The company naturally desires to protect its interests, and the injured party as naturally desires to receive the greatest possible remuneration for injuries sustained.

The surgeon is the innocent cause of a good deal of trouble which has arisen over this vexed question. His clinical experience has taught him there are wide differences of opinion as to the gravity of a particular case, and his reading teaches him there are as wide differences of opinion among authorities as to what amount of force is necessary to cause certain anatomical disturbances and pathological lesions.

The surgeon is honest, and these investigations are made for the purpose of getting at truth, but interested parties take advantage of this honest difference of opinion between medical men, and use it to serve their own selfish ends. The strife has become so fierce of late that surgeons have turned their batteries upon each other, charging bias of mind and prejudice in accordance with financial interests at stake; in other words, whether they were surgeons of the railway company, or of the party injured. This unfortunate condition of affairs in a measure handicaps the free discussion and investigation necessary to arrive at the truth.

Mr. Erichsen and his little book is largely responsible for the difficulties which have arisen, and yet his statements in regard to what is now called "railway spine" have provoked investigation and discussion, called out hospital records and private clinical experience, until we are better able to diagnose and classify these mysterious injuries. Concussion of the spine, as Erichsen describes it, is certainly a very rare accident. His definition is "a certain state of the spinal cord, occasioned by external violence, a state that is independent of and usually, but not necessarily, uncomplicated by any obvious lesion of the vertebral column, such as fracture or dislocation."

How many cases have you seen that will answer to that definition?

In the record of our civil war, outside of fractures and dislocations, there are only seventy-five cases of spinal injury of all kinds, and of these only two were caused by railway accident.

The object of this paper is not to thoroughly discuss this subject, nor is it to defend either the railway company or the unfortunate individual who has been caught in the wreck, but to report two cases which have come under my own observation, and allow you to decide whether they are typical, genuine cases of concussion of the spine, or spinal sprain; either or neither.

CASE I.—William S., Jr., traveling salesman, while getting off a Fremont, Elkhorn & Missouri Valley train, at the depot in York, January 16, 1892, slipped from a snow-covered car step and fell, striking the sacrum and the lower lumbar vertebra on the sharp edge of the step. There was intense pain following the accident, so that it was necessary to use chloroform in order to remove his clothing and make a thorough examination. There were no dislocations or fractures of the vertebral column, so far as could be determined, but bruised, discolored, and swollen muscles, with inability to move without aid, and paralysis of lower extremities. The shock was accompanied with vomiting, headache, delirium, chills, and fever. Great difficulty was experienced in getting free action of the bowels, and the bladder could not be emptied except through the catheter. He soon began to slowly recover from the immediate effects of the injury, and in ten days was removed on a bed to his home in South Dakota. He then passed out of my immediate care, but I heard from him at intervals. For several months he remained partially paralyzed in the lower extremities, and was only able to move about with the aid of crutches. He had allowed what little accident insurance he carried to expire a short time before, and, as he did not hold the railway company responsible for the accident, released it before he left York. The company paid all bills and carried him home on the private car of one of the officials. Whether the company ever gave him any further compensation, I am unable to say. The Traveling Men's Association, of which he was a member, with their usual generosity, presented him with quite a large purse to relieve his immediate wants. This is the record of what appears to be a genuine case of "railway spine," though not occurring on a railway wreck.

CASE II.—N. M. G., real estate and insurance agent, resident of York, was returning from Lincoln, December 26, 1895, when the passenger train ran into the caboose of a freight standing at the depot of the Burlington & Missouri River railroad at Seward. He had partially raised off the seat, and when the trains collided was thrown over the back of the seat in front, striking his right side and back and landing in the aisle. He walked out of the car with some assistance and was taken to the hotel by Dr. Shidler, of York, who was at the depot for the purpose of taking the train home. The Burlington & Missouri surgeon, Dr. Reynolds, was sent for, and together they made an immediate examination, but could find nothing but a little discoloration on right shoulder posteriorly, and slight bruise on right ankle. He wanted to be taken home that evening, but when he discovered the company was paying the bill he decided he would remain where he was. He returned home on the 27th, was seen by Dr. Shidler and his family physician, Dr. Farley, on the 28th, and on the 29th, by direction of Dr. T. P. Livingston, medical director of the road, I took charge of him as surgeon of the company.

*Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

I found pulse normal, temperature a little subnormal. He complained of tenderness, pain, stiffness of the muscles of the right shoulder and scapula, and tenderness over dorsal and lumbar region of spine. I found two small scars on inner surface of right ankle, and he complained of tenderness and said he could not walk on that foot. On the 30th complained of severe pain in the region of the liver anteriorly; temperature little subnormal, pulse normal. Bowels acted with little assistance, and bladder emptied without catheter. He remained in bed until about January 8, with practically no change in above conditions, when he began to sit up part of the time. From this time until the 1st of February he was up and down; complained a good deal of pain in abdomen, back, and shoulders.

About this time he began to get out of doors, but still used cane and crutch. Discharged from treatment 29th of February, just two months after first seen by me. He did not fully recover, however, for another month or two. The objective symptoms did not at any time accord with the serious injuries he claimed to have received. Diagnosis was apparently easy and prognosis favorable, but circumstances were such as to make any treatment given very unsatisfactory, and a speedy recovery almost impossible. He carried some $17,000 accident insurance, with a weekly indemnity of $100 or more, and it was very hard to persuade him that he would in all probability recover in a very short time. I did not care to take the entire responsibility of the case myself, and advised Dr. Livingston to come for a consultation. He did not come, but sent Dr. M. H. Everett, of Lincoln, who carefully examined him and made his report.

This was four or five weeks after the accident and about this time the railroad company succeeded in getting a settlement of his claim.

Dr. A. R. Mitchell, of Lincoln, made an examination for the Woodmen Accident Company, in which he held a policy.

Twelve weeks after the accident occurred a special medical examiner came on from New York to examine the case and effect a settlement. After looking him over he offered to pay him not only for the twelve weeks past, but two in advance, $700 in all, if he would only recover, or, if not willing to do that, release the Preferred Accident of New York of its indebtedness. He was willing to release, but not recover. About this same time a special adjuster came all the way from Hartford, Conn., in the interest of the Ætna, and after a personal interview and a history of the case from me made him an offer of $500, which he accepted after some hesitation, and still he did not fully recover. Drs. Shidler and Farley, of York, also made examinations in the interest of other companies, but recovery was not complete until all accident companies had come to a settlement, with perhaps one exception. At various times urine was examined which responded to the blood test, though at no time could any examiner get him to pass urine in his presence. He either said that he had just passed it or that it was impossible to void it in the presence of any one, even his wife.

You here have the record of a case of railroad spine, or spinal sprain, or sprain of the muscles of the back and abdomen, which, to say the least, looks suspicious and very peculiar. That there was some injury I do not question, but that there were as serious lesions as claimed, I very much doubt.

I believe that all the medical gentlemen who examined the case will agree that while the objective symptoms did not indicate any serious pathological conditions (unless the bloody urine was an exception), yet the subjective symptoms could not be successfully combatted, and the burden of proof was on the defense; in other words, the companies felt they could not successfully fight the claims, and paid rather than contest them. The claimant was a prominent citizen, and bore a good reputation.

It is true that on a former occasion he was thrown from a buggy one dark night and fractured his arm, and at another time lost his house and its contents by fire, and on both occasions was fully insured. These are accidents which might happen to anybody, yet the history of this case indicates that the injury was not nearly so serious as claimed, and that had early compromise and settlement been effected, the spinal and other symptoms would all have disappeared long before they did. One train was at a standstill and the other had slowed for the station stop, so that the shock of collision could not have caused all the apparent disturbances. Of course we recognize the fact that the nervous symptoms could be exaggerated and prolonged by repeatedly detailing them to inquiring friends, by the frequent examinations made for the various companies interested, by uncertainty as to the satisfactory settlement, and the fear of tedious litigation before final settlement. After final settlement this case apparently recovered, and though there were, doubtless, some injuries inflicted, yet it was not nearly so severe as claimed, and perhaps could not have been successfully combatted in any court.

In the first case the party was more severely injured than he knew, and might have claimed a handsome remuneration, though he did not hold the company responsible. In the second case the company was willing to assume the responsibility of its employes and adjust a claim which, to say the least, was not as Cæsar's wife—"above suspicion."

It is this class of cases that give the railway surgeon more trouble and anxiety than any other. Not only because he desires to do justice to the company, but justice to the injured as well. The company desires fairness, and is willing to pay an equitable claim, and frequently, if left to his own judgment, the party injured is willing to accept a fair settlement. Too often, however, friends interfere, and a needy lawyer, who sees a good round fee in the distance, persuades him that really it is not just right for him to recover too rapidly. Then if he succeeds in getting the case into court, he finds a jury as ready and willing to assess the corporation as it is to assess the unfortunate doctor who finds himself caught in the dragnet of a suit for malpractice.

Digitized by Google

MATERIA MEDICA AND THERAPEUTICS.*

By W. F. MILROY, M. D.,

PROFESSOR OF CLINICAL MEDICINE AND HYGIENE, OMAHA MEDICAL COLLEGE; PHYSICIAN TO IMMANUEL AND DOUGLAS COUNTY HOSPITALS.

A moment's consideration will suggest to your minds numerous agencies through whose means new remedies are continually being brought to the attention of the medical profession. The study of plant life, the researches of the chemist, the laborious studies of the biologist and bacteriologist, the researches of enthusiastic practitioners of medicine, the enterprise of manufacturing pharmacists and owners of proprietary remedies, and sometimes by pure accident, new remedies and new applications of remedies long in use are brought forward.

A categorical narration of a list of such remedies as have succeeded in gaining the attention of some medical journalist during the year, together with a mention of their physiological properties so far as known or guessed at, and their supposed good and bad characteristics, is the classical conception of the paper that I should present to-day. This has, I believe, by unanimous consent been voted a bore. Every practitioner who reads medical journals (and where is there to be found one who does not) is already familiar with these things, so what excuse can be offered for a rehash of them on an occasion like this. I will, therefore, not molest the shades of departed custom, but will ask your attention for a few moments to some general considerations pertaining to the subject of materia medica and therapeutics.

All enlightened physicians aim to use the materia medica scientifically. The administration of medicines, to be carried on in a scientific manner, must be given with an intelligent idea of the pathological conditions existing in the patient, the indications to be met by remedies, and an understanding of the action of the drugs when introduced into the human circulation. It is evident that inasmuch as we deal with living human beings, absolute exactness in our information upon these matters is not within our reach, and we cannot hope to see the practice of internal medicine become an exact science. Nevertheless, using the term with some degree of freedom, the term scientific medicine is not improper. The accumulated knowledge which we have is the result of a long period of observation, close and oft-repeated. Much of it has never been absolutely demonstrated, and never will be; but, by a process of inductive reasoning, our alleged facts approach so near to absolute certainty that, to all intents and purposes, they may be so considered.

The human mind has its limitations. In the case of most of us these limitations are reached before we have progressed very far, and it is to our own advantage and that of those who have to do with us as physicians, that we clearly recognize this fact. In my opinion, true progress in our profession is variously handicapped by the attempt on the part of physicians to use, in their practice, too great a number of drugs. "He doeth much that doeth a thing well," was one of the wise epigrams of that wonderful man, Thomas a Kempis. To administer drugs well implies a comprehensive knowledge of their actions in physiological and pathological conditions; in doses of every kind as to size and frequency; in every menstruum, in all but infinite variety of combinations with other drugs, in children and adults—in short, under all conceivable circumstances. Gentlemen, only the mind of a Bacon, at the end of a life a century in duration, occupied in infinite toil, could so master the drugs of the United States Pharmacopœia. How, then, can an undergraduate in a medical school, or one of us practitioners, more or less busy with our efforts to earn something to eat, hope to perform such a labor of Hercules. And this takes no account of the long list of new remedies which is perpetually importuning for our attention.

If I were called upon to instruct a class in a medical college upon the subject of materia medica and therapeutics, four-fifths of the drugs listed in the United States Pharmacopœia would be eliminated from the course. I would select for them a limited number of remedies, and my efforts and theirs would be devoted to securing in their minds a real understanding of these comparatively few drugs. The same, in substance, I hold to be practically true of the physician. Success, in the sense of a Kempis, in the use of remedies, lies in the direction of strict limitation of the number to be used.

I would not have the search for new and improved methods of treatment abandoned. There are those so situated that they can carry on this work advantageously. To permit it to cease would mean stagnation. But for the man in general practice to add to his every-day armamentarium every new thing that is suggested is not to promote substantial progress.

A very successful English writer, when he abandoned the practice of medicine for literature, gave as one of his reasons for such a course that in prescribing for his patients he never knew whether his remedies did any good, or whether the improvement which he saw was wholly the result of the vis medicatrix naturæ. I have no sympathy with those who decry the value of drugs properly administered, or their efficacy in relieving diseased conditions. This savors of affectation or of ignorance. No careful observer, of any considerable experience, can for a moment doubt their value.

On the other hand, not a few practitioners there are who, for the cure of diseased conditions, pin their faith and reputation unreservedly to drugs. Here again is error. We of the present day, more than ever before, if we are abreast with our own time, must include in our materia medica therapeutic measures which do not consist in the exhibition of pills and powders, but which are purely hygienic. Doubtless every one whom I address has observed in the current medical literature of recent years frequent mention of the conspicuous falling off of business among physicians. This complaint has come, not alone from our own Nebraska, but from every part of the Union, and possibly even more from abroad. There are, I appre-

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

hend, a number of causes contributing to this end, but chief among them, and more potent than all others combined, is the improvement in sanitary conditions which everywhere prevails. The possibilities in this direction are by no means exhausted. Dr. Osler makes the assertion that the legal authorities of Maryland, acting under the advice of the medical profession, could stamp out of existence in that state typhoid fever in three years. Such measures as these have in view not the cure, but the prevention of disease. It is likewise true that in the cure of disease sanitary measures should hold a conspicuous place. In comparison with the benefit to which they are entitled from the services of their physician, those patients will fare but ill whose doctor ignores this resource. I am inclined to believe that here is a truth which stands in need of urgent and oft-repeated iteration in the ears of our profession.

There is a certain type of physician in whose mind the most conspicuous thought suggested by allusion to medical practice is drugs and doses. These men are attentive students of the cheap medical journals that daily, as sample copies, come to our offices and pass swiftly to the waste basket. These publications contain page after page of ready-made formulæ for the cure of every imaginable ailment. That they are in demand is evidenced by the great circulation they enjoy. It may be true that this cart-before-the-horse conception originated during the formative period of their medical ideas, in the medical college instruction which these doctors received. Beyond question, it is true that if all physicians could become possessed with the fundamental idea that a diagnosis, accurate, definite, thoroughly worked out in all its details and to all its conclusions, is the only foundation upon which it is possible to base the scientific administration of remedies, there would be an end, in large measure, to the empiric use of second-hand formulæ; a tremendous advance in professional excellence would be accomplished, and materia medica and therapeutics would assume their proper place among the sciences with which our work is concerned, as the great weapon with which to prosecute our campaign against disease.

ACUTE PURULENT INFLAMMATION OF THE MIDDLE EAR.*

BY A. N. LOPER, M. D.,
COLLEGE VIEW, NEB.,
SUPERINTENDENT NEBRASKA SANITARIUM.

Acute inflammation of the middle ear is a malady which is often both interesting and painful to both patient and physician. Who of us has not with reluctance answered to a call in the middle of the night near the ides of March, when earth and air were chilled and damp with the breath of the contest between the icy grasp of winter and the inevitable advance of spring, and found a little patient suffering to distraction with pain so excruciating and intolerable in character that it would make the most stolid nature in the profession wince and long for an analgesic?

And how many of us have seen persons in middle life suffering with a chronic and very offensive purulent ottorrhea, the result of some one's neglect in an acute inflammation a dozen years before? With an inerasable recollection of some of these cases in your minds, I will ask you to review with me some of the characteristics and treatment of acute purulent inflammation of the middle ear.

It is claimed that the inflammation usually begins in the attic. This portion of the tympanum, with its reduplication of mucous membrane, its large amount of connective tissue, and ligamentous bands, affords a very favorable site for the development of a pyogenic inflammation. This little delicate drum cavity, with its large amount of bony limitations and its peculiarly delicate ossicles and fine nerve filaments contained within its walls, furnishes conditions in which an inflammation may do a great deal of mischief in a short time, and also continue its effects for an indefinitely long period.

A purulent inflammation may follow an acute catarrhal otitis media, or it may develop suddenly and without any previous catarrhal symptoms. We have reasons for concluding that the infection usually takes place through the Eustachian tube. Among the common causes may be mentioned the eruptive fevers of childhood, diphtheria, la grippe, tonsillitis, pharyngitis, poisons developed from an enfeebled and foul stomach, adenoid growths, the passage of irritating fluids out of the Eustachian tube, etc. Sudden changes of temperature, exposure to wet and cold, excessive diving while bathing in cold water may be mentioned also as determining causes.

The onset is usually sudden; the patient complains of excruciating pains in the ear, tinnitus, vertigo, impaired hearing, etc. There is usually a marked rise of temperature, and not infrequently delirium and convulsions. In patients above four or five years the diagnosis is usually easily made from the subjective symptoms. However, in order to proceed intelligently, it is necessary in all cases to make a complete and careful examination of the external auditory canal, the membrane of the tympanum, and the posterior auricular region. In the adult this is easily done, except in cases complicated by inflammation of the external canal. In nervous, frightened, or ill-tempered children, however, there may be a greater draw made on the patience, tact, and perseverance of the physician. The naturally narrow canal may be still further occluded by swelling and the debris of an exfoliative dermatitis. As in this procedure each case may require individual tact and originality on the part of the operator, I will not attempt to go into detail in explaining methods.

The prognosis in ordinary cases is generally favorable if seen early and properly managed. However, in very young and delicate children it is not uncommon to have the case complicated by a meningitis from which a fatal termination results. Some statistics give as high as 2½ per cent. of acute inflammation of the middle ear resulting in this way from intracranial complications. With a proper appreciation of this danger in view, we cannot lightly and carelessly

* Read before the Nebraska State Medical Society, Lincoln, May 20, 1897.

Digitized by Google

pass by a case of acute inflammation until we know that the destructive process is checked in its incipiency, or that there is free drainage for whatever liquid may be causing the pressure and pain in this portion of the auditory apparatus.

When called to see a patient suffering in this way it is expected, of course, that the doctor will do something immediately to relieve the sufferer. This, indeed, should be done, and done quickly, but at the same time with due deliberation and forethought. Especially in this disease should we be on our guard against the liberal administration of that soothing oriental balm once dedicated to the god of sleep. Opium, under these circumstances, may drown the warning notes of present pain, while fires of inflammation are progressing unnoticed, and doing a work of destruction that may never be repaired, or even which may cause an early dissolution, from its encroachment upon intracranial tissues.

If seen early, we may hope to allay the inflammation by the application of leeches, and heat in some form, to the diseased organ. Leeches applied over the mastoid region, or anteriorly to the tragus, may do much toward the aborting of such a case in a very short time. Heat applied in the form of the ear douche has been of inestimable value in my own experience. From a fountain syringe have instilled into the offending member a hot solution of bicarbonate of soda, one dram to the quart of water, the soda solution serving to soften and dislodge any of the secretions which may have become hardened and adherent in the external canal. This treatment, repeated three or four times at intervals of two hours, the patient in the meantime lying with the inflamed ear upon a hot compress or hot water bottle, will in the majority of cases bring about the desired result. If, however, relief delay to come by the use of these milder measures, a paracentesis will be in order, as this extra pressure upon the delicate tissues within the tympanum will almost surely cause serious destruction if long continued. In adults this slight operation may be performed with little difficulty without the use of any anæsthetic, but in the case of some frightened and refractory children it may require complete anæsthesia, good reflected light, a good speculum, and a very good knife, in order to operate satisfactorily.

The technique of the operation is given differently by different authors, but the following as outlined by Dench is a good way to proceed:—

"The knife should be entered just behind the processus brevis, and carried upward and inward parallel to the neck of the malleus, until it has pierced the cellular tissue within the tympanic vault and impinges upon the bony wall. The knife is then swept backward to the periphery of the membrane, the deep tissues being divided throughout the entire extent of the incision. It is also well, on reaching the periphery, to extend the incision directly outward, along the supero-posterior wall, for a distance of a quarter of an inch, dividing all the soft part down to the bone."

The canal should be kept clean by frequent irrigations with some antiseptic solution, such as bichloride of mercury 1-5000, carbolic acid 1-500, peroxide of hydrogen 1 ounce to the pint of water, or a saturated solution of boric acid.

In many of these cases of acute purulent inflammation the mastoid antrum is affected also, and perhaps in many the mastoid cells; but with a free incision according to the method above given, complete drainage is furnished, both to atrium and attic, thus affording relief to the mastoid symptoms without any further surgical interference.

SENILE GANGRENE, MITRAL REGURGITATION WITH HEMIPLEGIA, AND GENERAL ANASARCA.*

By H. A. HARE, M.D.,

PROFESSOR OF THERAPEUTICS AND MATERIA MEDICA, JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

GENTLEMEN: The first case which I desire to show you to-day is one which you will rarely meet with; it is that of a man 62 years of age, who has been kindly referred to the wards of the hospital by the chief of the medical clinic, Dr. Thomas G. Ashton. When he first came under Dr. Ashton's observation the discoloration of his little and middle toe on the right foot, combined with the rapid changes in its color, depending, apparently, upon vasomotor disturbance, and the description of the subjective symptoms from which he is suffering, rather pointed to the case being one of Raynaud's disease, complicated by (its rather rare ultimate conclusion) gangrene, but the careful study of the man's history, the exclusion of many of the nervous symptoms which are seen in some cases of Raynaud's disease in its advanced forms, and the fact that an examination of his arteries shows far advanced atheromatous changes, makes me inclined to believe at this time that the case before us is one of true senile gangrene, and that it is not an advanced form of the curious vasomotor and trophic disturbance which I have just mentioned. But although we have excluded Raynaud's disease as a probability or possibility in this case, it is not proper for us to jump to the conclusion that it is a case of senile gangrene until we have studied other possibilities which should come into your minds when meeting such an instance of degenerative disease.

You should at least recall to your minds, on meeting with such a case, the fact that in some portions of the world, although very rarely in America, a condition exists which is known as ergotic gangrene, which depends upon the fact that poorly nourished peasants have eaten large quantities of rye bread made from rye which has been infected by ergot during its period of growth, and the continued action of this drug upon the smaller blood vessels, combined with general malnutrition, results in local death of such extremities as the toes and fingers. The history of this man's life, the fact that he does not belong to the lower walks of life, that he is fairly well nourished, although quite thin, and that he has not eaten rye bread or been exposed to any of the causes which I have named in connection with ergotism, excludes, of course, such a possibility from his case. The season of the year

*Clinical lecture delivered at the Jefferson Medical College Hospital, January 14, 1897.

Digitized by Google

might lead us to suppose that the condition of his toes was dependent upon a frost-bite, due to undue exposure. But his history excludes any such possibility, and you see that the gangrene is entirely dry, that it is the little toe which is chiefly affected and that it is perfectly black, shriveled, and dry, whereas had the toes been affected by frost-bite and become gangrenous they would be undergoing a process of sloughing off, and the gangrene, if present, would be of the moist rather than the dry form.

We must go still further, however, as to other possibilities in this case: one of them is diabetes mellitus, a disease which sometimes, but not very commonly, results in the development of gangrene, particularly of the lower extremities, probably owing to the degenerative changes which occur secondarily in the blood vessel walls in this serious disorder of nutrition. You will remember, some of you, perhaps, that a number of years ago Dr. William Hunt, of this city, one of the surgeons to the Pennsylvania Hospital, analyzed sixty-four cases of diabetic gangrene, and out of fifty of these thirty-seven occurred in the feet and legs and only three in the fingers, the other areas of the body which were affected being widely scattered and small in number. The very rarity of this complication would seem to exclude it from the possibility in this case, though the exceedingly thin condition of the patient would make you think of the possibility of his being a diabetic. Careful examination of his urine, both as to its quantity and as to its ingredients, on several different days fails to reveal the presence of sugar. Neither has he any of the characteristic symptoms of diabetes mellitus. We can therefore exclude from his case this possible causative factor and pass on to another possibility which we must consider, namely, whether he is not suffering from an embolus, which has plugged the artery supplying these toes, with the result that this slow form of gangrene has developed.

With this suspicion in our minds, our first duty is to make a careful examination of the heart and of the man's history, to determine whether this organ, the most common seat of emboli, is the seat of origin in this instance for an embolus, for you will remember that tiny clots of blood or other particles are sometimes swept away from the cardiac cavities or valves in cases of endocarditis, both acute and chronic. There is nothing in his history, however, of the nature of cardiac disease, and the examination of his heart is entirely negative, except for this important point, namely, that the sounds are exceedingly feeble, that notwithstanding his thinness the apex beat cannot be palpated, and that his cardiac condition is, therefore, one of extreme asthenia. His pulse in his wrists is also exceedingly small and feeble, and this decrease in its force is most marked, curiously enough, both in the wrist and ankle upon the side of the edematous foot. Only by the most careful palpation can arteries about and below the ankle be outlined, and the trickle of blood through them is so slight that were they not thickened by atheroma, I doubt if they could be readily found. The patient suffers very greatly from pain which arises over the base of the little toe, which is entirely gangrenous, and over the middle toe, at the tip of which you see the gangrenous process developing. Generally this pain feels, so he says, as if his toe were being frozen off, but if he wraps the foot up warmly or brings it near any hot object, with the idea of removing this sensation of extreme cold, the pain changes from that of extreme cold to extreme heat, and he feels as if the toes were being burned off. The pain occurs in paroxysms, independent of any motion of the foot, and radiates up the leg, so that frequently its greatest severity seems to be midway between the ankle and the knee.

A close examination of the foot, you see, reveals no purulent accumulation, no noticeable odor, and comparatively little redness above the areas which are actually involved. Although there is no sharp line of demarcation at the base of the middle toe. You will notice, too, that this reddening which occurs at the base of the toes is gradually extending up toward the external malleolus and the upper surface of the foot, and should this redness increase and extend still further, it may be necessary to call in a surgeon to perform amputation, although the advanced atheromatous condition of his blood vessels should make us hesitate a long time before we resort to surgical interference, unless it is absolutely necessary. Generally, Nature in these cases makes a line of demarcation, which gradually deepens until the part which is involved gradually separates itself from the healthy tissue. The treatment which I have adopted in this case, after consultation with my colleague, Professor Keen, is to have it carefully washed and thereafter kept clean by bathing in alcohol every day, after which the foot is thoroughly dried and the toes kept apart and surrounded by sublimated gauze. The part is then wrapped up in borated gauze. At the same time, for the purpose of improving his nutrition and strengthening his circulation, I have ordered for him ten drops of tincture of nux vomica and three drops of Fowler's solution three times a day, and as full and nutritious a diet as he is able to digest. Some of the pain which he suffers as a result of this process seems to be neurotic, for we have found that full doses of acetanilide or phenacetin materially modify it, to such an extent that he can sleep fairly comfortably. On some occasions, however, the pain becomes so excessive and occurs in such violent paroxysms that hypodermic injections of morphia are required.

The second case which I show you is that of a woman 52 years of age, who was admitted to the hospital some days ago, with a history that she had been suddenly seized early in the morning by a "stroke of paralysis" involving the entire right side. When I examined her yesterday I found that there was absolute flaccid paralysis in the right arm and leg, that the face was drawn to the left side, but that there was no failure of muscular contraction in the forehead or inability to open or close the eye on the paralyzed side.

An examination of her tactile sensibility by means of pin points showed that she was anesthetic in the paralyzed arm to the elbow, that she had impaired tactile sense up to the middle of the arm, and that the upper third of the arm was almost normal in its sensibility to touch, while over the shoulder the skin was

Digitized by Google

markedly hyperesthetic. On testing her thermal sensibility it was found that it also was slightly impaired in the lower part of the forearm, but above the elbow she seemed to have an increased pain sense over and above that of the left arm, which was not paralyzed. In the presence of a hemiplegia occurring in a woman at her age there are three possible cases which should enter into your minds before making a positive diagnosis: The first of these is the possibility of its being a hysterical hemiplegia. A careful examination of the patient, however, shows that she lacks the peculiar sensorial disturbances which are so characteristic of hysteria, that she lacks the sharp outline between the anesthetic and non-anesthetic areas in the middle line of the body which is so characteristic of hysterical patients; that she has not the facial expression or general appearance of a case of hysteria, nor has she in her history, so far as we are aware, any hysterical manifestations. Further than this, total hemiplegia, involving chiefly loss of motion, is very rarely due to hysteria, hysterical paralysis being more frequently limited to single limbs, and being usually of a sensory rather than of a motor character, nor so widely distributed over one side of the body. We can, therefore, exclude the possibility of hysteria from this case and pass on to a consideration of the possibility of the paralysis being due to embolus which has plugged one of the blood vessels supplying the motor area of the cortex or the tracts leading from it. As in the case of senile gangrene which I have just mentioned, we naturally turn to the heart to discover whether this organ is the possible source of an embolus, and on examining it I find that she has a loud mitral regurgitant murmur, which is, however, apparently the result of a very old lesion, and not the result of an acute endocarditis. An examination of her kidneys and the urine failed to give any evidence of a septic process which might have resulted in an embolus, and the fact that mitral obstruction is the cardiac lesion which usually results in embolus, rather than mitral regurgitation, also makes me feel inclined to believe that an embolus is not the cause of her paralysis. However, you should remember that the diagnosis of embolism from hemorrhage, producing this loss of power, is always more or less difficult; for in embolic paralysis, as in hemorrhagic paralysis, the onset is usually sudden and often follows some strain or arterial excitement. Paralysis from embolism is also more common upon the right side of the body than upon the left, owing to the fact that it is easier for the embolus to pass into the left middle cerebral artery than into the right, and you notice that this patient has right-sided paralysis. Another point in favor of embolus in this patient is the fact that she has had no secondary rise of temperature or other evidences of cerebral irritation, as often results from the formation of a clot in the neighborhood of the internal capsule, a reaction which is quite frequently seen when the hemorrhage has been so severe as to produce complete hemiplegia. While it is not possible, I believe, to be certain whether the patient suffer from hemorrhage or embolism, I am inclined to favor the idea of hemorrhage and to believe that in this instance the lesion is in the internal capsule, in such a position that it not only involves the motor fibres for the arm and leg, but is sufficiently far back from the base of the internal capsule to involve some of the sensory fibres, thereby producing the anesthesia which I have named. Further than this, this patient has well marked aphasia, which is very frequently found in cases in which the lesion is in the area I have mentioned. At the present time she is absolutely unable to give vent to any sound which resembles a word, and while she understands everything that is said to her and is apparently quite intelligent, she is quite unable to acquaint the physician or attendants with her wants. In this connection we naturally do not suspect for a moment that the facial paralysis to which I called your attention is anything more than a part of the general paralysis which involves this side of her body, but it is interesting to note that the muscles of the forehead and the muscles supplying the eye on the right side have in no degree lost their power. Indeed, the facial paralysis only involves the lower third of the face upon the right side. This, you will remember, is rather characteristic of cerebral facial paralysis, and separates it to a certain extent from the paralysis arising from injury to the facial nerve in the stylomastoid foramen. Ie is further of interest to note that in this woman's face atropic changes have not appeared on the paralyzed side, although it is now a number of days since the onset of the paralysis; whereas had the lesion been a peripheral one, by means of which the facial muscles were cut off from their trophic centers, the reactions of degeneration and wasting would have already begun.

The third case which I show you is one of ordinary parenchymatous nephritis, with very widespread and fully developed anasarca. The patient, as you see, is markedly edematous from head to foot. His lower eyelids are so filled with fluid as to be almost as pearly as would be blebs filled with clear serum, and the face is so swollen that the patient would probably be unrecognizable to his friends. Of still greater interest is the condition of his lower extremities. Here you will notice that the skin is exceedingly tense and pits deeply upon pressure, that the feet are very much distorted by the large quantity of fluid which is in their subcutaneous tissues, and, what is still more interesting and far more rare, you notice all over the thighs what look at first glance like the discolored striæ which you sometimes see in the skin of the thighs and buttocks of a woman far advanced in pregnancy. A closer examination, however, shows that these are not discolored striations, but that they are blebs of dropsical exudate, like huge longitudinally arranged sudamina, some of them being from one-half to one inch in length and an eighth of an inch wide. You will notice that the scrotum is considerably filled with fluid, and that the penis is also distorted by the exudation. In addition to these symptoms, you should notice the extreme and characteristic "renal pallor" of the patient, the mental torpor, which is due to a slight uremia, and those of you who are near enough will notice that the odor of his body and the odor of his breath is extremely offensive. It is hard to imagine

Digitized by Google

how a patient could allow himself to get in such an advanced form of renal disease, with dropsy, before presenting himself for treatment.

With the object of reducing his dropsy, and with the idea of avoiding the danger of uremia, I shall order for him a sixteenth of a grain of eleterin, given each night until he is so thoroughly purged of large quantities of fluid that his dropsy is materially diminished; and I shall also order for him, with the object of increasing the quantity of liquid eliminated from his kidneys, a very old-fashioned, but, nevertheless, very useful pill, composed of one grain of powdered digitalis leaves, one grain of powdered squill, and one grain of calomel, to be taken three times a day. I shall direct the resident physician to have his urine carefully measured, and should the urine not increase under the use of this pill it shall be stopped at once, lest he suffer from what is known as the cumulative action of digitalis.

Note.—Four days later this patient was brought before the clinic again, when almost all the edema of the face had disappeared, the skin of his legs was no longer so tense, and his mental state was greatly improved.

The Prevention of Iodism in the Use of Potassium Iodide.—Spencer (Journal de Medecine de Paris) is credited with the following formula:

℞ Potass. iodide	. . .	parts xxx.
Ammon. ferrocitrate	.	parts iv.
Tinct. of nux vom.	. .	parts viij.
Aq. dest.	. . .	parts xxx.
Tinct. of cinchona	q. s. ad.	parts cxx.

M. Sig.—A teaspoonful in half a glass of water, to be taken after each meal. The tincture of nux vomica and the ammoniocitrate of iron are said to check the tendency of coryza and at the same time to act as tonics.—The Prescription.

A TRICYCLE AMBULANCE.

The tricycle ambulance in regular commission is the latest novelty on wheels in Chicago. It was constructed for the Chicago Hospital, at Cottage Grove avenue and Forty-ninth street, and is an ambulance on three wheels, and designed for carrying the sick and injured to the hospital. The tricycle form was adopted not for the sake of its novelty, but because the inventor, Dr. J. T. Binkley, Jr., believed it to be the safest and easiest manner of transporting the sick and injured through the streets of the city. It is simply a covered body mounted on three wheels. The rear wheels are just back of the middle of the body, and the steering wheel in front. The two rear wheels are connected by an axle. From a point on each side where the front wheel of a tandem would be located another axle runs across. The tubing on each side is prolonged to meet in front in the shape of a bow, where it is supported by the front wheel.

In front of the saddle on either side is a pair of handle bars, which are connected with the steering wheel by a mechanism similar to that of a tandem. By this arrangement the riders are in a position to exert their strength to the best advantage. A speed of seventeen miles an hour can be attained.

The body itself is oval on the top. All of its corners are rounded off, to oppose as little resistance as possible to the air. It is seven feet in length, three feet high, and two and a half feet in width. The body is made of whitewood, an eighth of an inch in thick-

ness and as highly finished as the most expensive brougham. The total weight of the ambulance is 148 pounds.

The patient rests on a pneumatic bed arranged in stretcher form, and immediately on withdrawing this from the chamber two sets of automatic legs are brought into service. These terminate in four-inch rubber-tired wheels, so that the stretcher is at once converted into a wheel litter. There is an electric lamp inside the vehicle, and another one, supplied by a storage battery, is placed on the front of the machine. The new machine has been in use long enough to prove itself ideal for the purpose. No objection has been made by patients to riding in the new ambulance. The hospital is provided with a horse ambulance, but many of its patients have expressed a preference for the tricycle conveyance.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$1 00
Single copies..... 10

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, AUGUST 14, 1897.

This number of the WESTERN MEDICAL REVIEW will fall into the hands of many who are not subscribers. To such we would say: This is our method of advertising. However, do not expect to get another copy unless you send for it. If you think that the REVIEW is worth a dollar a year let us have your dollar.

THE BRITISH MEDICAL ASSOCIATION.

The meeting, for the first time on this continent, of the British Medical Association in Montreal from the 31st of this month to the 4th of next, inclusive, reminds one of the political and social possibilities of such an association. This is not only the largest, but also the most influential medical body in the world. No important medical act has passed through parliament that has not first gone through this society's committees. British, unlike American, doctors have made themselves felt to such a degree that their representatives in parliament not only listen to, but heed their requests. If our doctors were to hold the good of their profession above the domination of party, such an experience would be impossible as that witnessed at our state capital last winter, where a lot of prominent, cultivated professional gentlemen were ignored by a lot of cheap politicians.

Socially, the British Medical Association has much to commend it. Scientific papers are read and discussed from 9 A. M until 3 P. M., but from this on the time is usually given up to social enjoyments. The family of many doctors are in attendance, and the ladies of the town in which the meeting is held are always interested and the afternoon is taken up with excursions and garden parties, and the evenings given to receptions and banquets, much more so than with our national association. Thus, without detracting from the scientific value of these gatherings, very much is gained from their social character. In our own country at similar associations, the scientific ardor is usually most commendable; the social features, as a rule, are less prominent; while the political influence is almost nil.

The membership of the British Medical Association is very large indeed, including, as it does, not only the British isles, but all the important colonies as well. But little business aside from the discussion of scientific subjects is done at the general meetings. This is done by committees and the society's manager, who may always be found at the association's building in London. Here, also, is published the British Medical Journal, the association's organ, which is, as every one knows, one of the largest, best, and most influential medical journals published anywhere.

While the meeting at Montreal is a family affair, yet they have been kind enough to invite representatives from American associations, and many prominent professional men from the United States are on the program. No people in the world can so effectually freeze out an intruder as can an Englishman; but the royal manner in which they entertain a guest who has been bidden, only those may know who have had the experience. Our American confreres who may be fortunate enough to be invited guests, we know will have a most profitable and delightful sojourn.

THE ST. LOUIS EXPOSE.

Dr. Lanphear, editor of the American Journal of Surgery and Gynecology, assisted by the Tri-State Medical Journal and other medical papers, has been raising a hornet's nest among the profession of St. Louis. Judging from Lanphear's paper, the profession is in a sorry condition there. Fifty-cent hospitals, free dispensaries, and medical college clinics have apparently about absorbed all the practice of the city. And it would seem, if we are to believe the A. J. of S. and G., that all the members of the profession are badly mixed up in the scandal. There is no doubt but that there is considerable basis for this "exposure," and it will apply to several other places besides St. Louis. The free dispensary abuse, the free clinic abuse, is rampant wherever there are medical colleges, and that means every city of any importance, and in some which are not very important, in the country. Each college tries to get the largest clinic, so as to attract students, and many schemes that are not strictly honorable are adopted to increase the attendance. The trouble with St. Louis is that she has adopted the fifty-cent hospital scheme a little too extensively, besides the other abuses, and many good men, who ought to know better and do know better,

Digitized by Google

have been caught in the net set for them by the outsiders, who expect to make money out of this wholesale doctoring scheme. The expose that has been made has opened the eyes of some of the better men in the profession, and many of them withdrew from the positions they held when they found out the true state of affairs.

This craze, for it seems to be a craze, to belong to some medical college faculty, to be connected with a free dispensary, free clinic, or hospital, is playing sad havoc with the medical profession. The surgeon, the specialist, yes, and the general practitioner, seem to have the idea that the prestige obtained by being connected with these different institutions will be a benefit, and bring practice and prosperity. But it is very doubtful if they are not mistaken. It was so once, probably, but not now. To be connected with a medical college, a dispensary, or a hospital is now so common that it means nothing. And some day those who are working, literally night and day, doing free work in free clinics and free dispensaries, on an empty stomach, for prestige and prosperity that does not come, will get tired and weary, and will settle down as common doctors and will make a living by doctoring people who have become tired of receiving free, half-hearted treatment. Yes, the patients themselves, they who can afford it, will stop patronizing the free institutions, for they will find that the treatment and the consideration they get for nothing are not what they would get if they consulted the physician in his office and paid for the attention that was given by him.

We sincerely hope that the efforts being made in St. Louis for bettering affairs there may result in good, and that the reform movement may reach out to several other cities that are not very much better than St. Louis. And having gotten rid of the fifty-cent hospital evil, the free dispensary evil, and the free clinic evil, if they will turn their attention to getting rid of the cheap medical college evil, they will confer a lasting benefit upon the profession at large, and the people in general.

WE MUST EITHER PERFECT OUR ASEPSIS OR RETURN TO ANTISEPSIS.

In spite of the readiness with which the great majority of surgeons have given up antisepsis for asepsis, a voice is occasionally heard claiming that the results, of late years, have been worse than before antisepsis was so generally abandoned. The most recent and important of these is that of Mikulicz (Deutsche Med. Wochenschrift, 26, 1897). He cites v. Bergmann, who may well be regarded as one of the high priests of asepsis, as having suppuration in quite a large proportion of his operations for congenital dislocation of the hip, sometimes with a fatal result. Kocher reports 8.7 per cent. of suppuration in his operations for the radical cure of hernia, while M. himself, and several others, report serious suppurations after suturing uncomplicated fractures of the patella. In searching for the causes of these bad results, much stress has been laid upon the catgut, but it is strange that catgut should seem to cause so much more trouble of late years than it did in the antiseptic era, and that if it is the catgut which is to blame, the same gut will heal in without reaction in some cases and cause severe suppuration in others. Far more important is the question of the sterilization of the hands, for in spite of the immense amount of attention which this subject has received, no reliable method of completely sterilizing the hands has yet been found. After the most approved methods (M. prefers the alcohol-sublimate method) the germs on the surface may be removed so that at the beginning of an operation none can be found by culture tests, but during an operation of any length the more deeply-lying germs are brought to the surface, as Mikulicz has proved by numerous experiments in his own clinic; and this was found to apply particularly to hands that had, within a day or so, been contaminated by infectious material. To avoid this danger, M. has, for some time, been operating in gloves; not rubber gloves, as recommended by Robb and others, but ordinary thread gloves, which can be washed and used again many times. He and his assistants use from one to several pairs of these (after first disinfecting the hands as thoroughly as possible), according to the length and nature of the operation. In stomach and intestinal operations, for instance, M. uses one pair until the alimentary canal has been opened, then another pair for inserting the sutures, and finally, a third pair for closing the external wound. These gloves do not interfere in the least with the delicacy of most surgical operations; on the contrary, after getting used to them, they are a decided help in holding instruments and tissues. Where the fine sense of touch of the naked finger tip is required, the gloves are simply removed, and a new pair put on later. The gloves are, of course, sterilized in the ordinary way. During the three months in which M. has used them his results have been so much superior to previous ones that he has no doubt that in this way the danger of infection from the fingers may be completely done away with.

Another source of danger is from germs which may be blown into the wound from the nose and mouth of the operator or assistants, in speaking, coughing, or sneezing. Flugge reports that during ordinary speech germs can be blown, in minute particles of fluid, for some distance from the mouth; and although M. has long made it a rule to speak as little as possible while

Digitized by Google

operating, he now covers the mouth and nose with a light mull bandage, through which it is perfectly easy to speak and breathe. With regard to infection from the air, M. subscribes to the opinion of Flugge that surgeons, at present, tend to underestimate the danger from it, and he advises doing important operations only in small rooms that can be more thoroughly sterilized than the large auditoriums; admitting the students only with especial precautions, in small sections of six to ten persons.

Finally, after all that can be said of the most approved asepsis in well equipped hospitals, Mikulicz advises not to rely upon it in general practice, or in operating in the country, but to use antiseptic precautions in the fullest sense of the word; for if any dangerous germs do get into the wounds, the presence of even a minute amount of some germicide may restrain their growth until the tissues are in condition to guard against them. GIFFORD.

OUR DECREASING BIRTH-RATE.

Several of our contemporaries are apparently very much concerned at what is revealed by the later statistics in regard to the decreasing birth-rate in this country. The birth-rate of a nation has always been considered as a question of vital importance, but probably it is of importance to-day to only one nation, France. And there the importance of the subject is not a moral one, in the eyes of the French, but a military one. It is a question of power; a question of regiments. That her population is decreasing, rather than increasing, is probably true, and if it is true, and it keeps up, her power among the nations of the earth will in the course of a very short time drop from that of being first to that of a second or third rate. The reasons for the decrease in the birth-rate of France are many and various, but these do not concern us.

The birth-rate in the United States in 1880 was 31 to the 1,000, but in 1890 this rate had been reduced to a little over 26 to the 1,000. And so, according to this decrease, if it has run down in the same ratio, it must now be between 23 and 24, not very much above that of France. But there is a good deal of fallacy in these later statistics. In the first place, we have no reliable statistics in the majority of states. In the past this has been more true than it is at present, for many states are becoming more rigid in regard to reporting births and deaths. Again, taking certain states, we have peculiar conditions. The latest birth-rate given for Nevada is 16.30 per thousand; so that this state will be depopulated in less than a century unless the rate increases or there is immigration from other parts. But the same statistics which give the above low rate give the male population as 30,000, while the female population is only 16,000. Thus there were nearly twice as many males as females, but the statistician gave no account of this, but jumped to the conclusion that the birth-rate was only 16.30 to the 1,000, and, therefore, the population is dying out. Maine comes next lowest, and is given a birth-rate of 18 to the 1,000, but her low birth-rate is from the opposite cause, a larger number of females than males. Rhode Island has a birth-rate about the same as France, but she has 168,000 females to 157,000 males. Massachusetts has a birth-rate of 21.5 and she has 64,000 more females that males.

But in spite of all these fallacies, the birth-rate is undeniably decreasing. What is the cause? A lot of printer's ink has been wasted in giving reasons for it; one says it is emigration from the east to the west, making a superabundance of males in one part of the country and a superabundance of females in another. This is perfectly true, but it has always been so, to a greater or less extent. Another writer says that the cause can be attributed to the large number of women who have been unsexed by surgical procedures, and this writer says that 500,000 women in France alone have had their ovaries removed. Where he gets his statistics from he does not say. We doubt if any one has the courage to say how many women have had their ovaries removed in this country, but while the number is terribly large, and while the effect on the birth-rate is influenced by this, this influence is so slight that it is probably hardly appreciable. Criminal abortion is rampant in the land, and is growing, for the law seems to be powerless to prevent it. But the abortionist is not alone responsible; he adds his mite to lower the birth-rate. But this, too, is small. What, then, is the cause? Simply and solely because married people do not want children, and have learned how to prevent having them. That is all there is to it. "Society" has discovered the art of prevention, and is not slow in practicing the art. And there is no use moralizing about it and writing columns upon columns in arguing in favor of a change, telling what ought and what ought not to be done. The fact is, a large majority do not want children and have learned how to prevent it, and there you are. While this is going on there are developing a lot of women who are nervous, hysterical neurasthenics, who are unhappy, despondent, craving something, they know not what. Who suffer from a thousand and one ailments, aches, and pains, all more imaginary than real, and which can only be cured by mental healing, faith cure, or Christian science, or possibly by "orificial surgery." It is this phase of the subject that is of interest to the medical profession. We need not worry about our population dying out for several decades yet, anyway. There is no use for all the sentimental, pessimistic writing about the terrible effect on the country by a lowering birth-rate. If that was all there was to worry about we might slumber on in peaceful security.

Digitized by Google

Notes and News.

Dr. R. C. Elvin, of Nebraska City, died July 22, aged 75.

Dr. J. K. L. Duncan, who recently removed from DeWitt to Lincoln, has located at Malcolm.

Mr. Christopher Heath, of London, will deliver the Lane lectures at Cooper Medical College, San Francisco, this winter.

Dr. R. D. Mason, of Missouri Valley, Ia., will give a course of lectures on diseases of the rectum in the Creighton Medical College this winter.

Dr. Hugo Mager, of Denver, was thrown from his buggy a few days ago and fractured the base of his skull. He died in a few hours afterward.

Dr. Paul E. Koerber, a graduate of the Omaha Medical College, 1896, is in Europe taking post-graduate work there. He is at present in Munich.

A death is reported from England from taking twenty grains of antipyrin. The victim was a drug clerk, who took the drug to relieve neuralgia.

The board of trustees of the Cincinnati City Hospital have decided to isolate consumptive patients at a branch hospital on a farm. The building will be fitted for patients in a short time.

The full bench of the supreme court of Massachusetts recently held that it is actionable for a hospital to perform an autopsy on the dead body of a child without the father's consent.

Dr. Wm. Miller, a homeopathic physician of Davenport, Ia., recently performed craniotomy without consultation, and, according to the Iowa Medical Journal, has thus made himself liable to prosecution.

A girl in Hudson county, New York, was recently knocked down by a bicycle. While she was badly injured, she has fully recovered, except that she was rendered speechless by the accident and has not been able to speak since.

Dr. J. M. Emmert, of Atlantic, Ia., is mentioned as a candidate for state senator from his district. We sincerely hope he may get elected. We need just such men as Dr. Emmert in our legislative halls, and while we are told that a doctor should not go into politics, as a rule politics is made better and medicine loses nothing by his doing so.

Pig-bile tablets are recommended by Dr. George Harley, of England, for use in the treatment of jaundice, the bile of the pig being much better than that of the ox. The pig being omnivorous, like the human being, its bile contains exactly the ingredients necessary to supply the place of those absent from the digestive canal in cases of jaundice.

Indiana is a remarkable state in more ways than one. Perhaps the most prominent peculiarity is the large percentage of her physicians who belong to the state medical societies. There are in the state a few more than four thousand physicians, of whom over fifteen hundred are members of the state associations. It is doubtful if any other state can equal this record.

The St. Louis Clinique has been sold to the Moffett-West Drug Company—the Alta Pharmacal Company—and it is to be used for booming "Melachol" and other proprietary remedies of that firm. It will, of course, be a welcome visitor to the desk of the physician who does not subscribe for a medical journal because he has so many "sample copy" journals to read.

Dr. J. E. Moore, of Oakland, having been suffering from eye trouble, recently went to Chicago and consulted Prof. E. L. Holmes. Dr. Holmes thought his trouble was being aggravated by the winds and dust of the prairies, and advised him against returning until his eyes were better. Dr. Moore has therefore returned to his old home, Cumberland, O., where he will practice for the present.

The Prince of Wales is now a member of the medical profession. On July 19 he was formally created an honorary fellow of the Royal College of Physicians of London, and, after taking the required oath, was presented with a diploma of the college. The Prince of Wales is a great worker for the hospitals of London, and has always been considered an especially good friend of the medical profession.

What can a sensible student be thinking about who deliberately enters a college which demands only three years' course for graduation? Does he not know that he would be barred from entering a large number of states now with a diploma from such a school, and that many more states have passed laws that will require a diploma from a four years school after 1898? And yet these three-year schools seem to flourish.

Dr. H. B. Lowry, of Lincoln, has gone east and will attend the meeting of the British Association at Toronto, which meets on the 18th to the 25th of this month. Then, after a pleasure trip through Canada, he will attend the meeting of the British Medical Association at Montreal, which commences August 31. As president of the Medical Society of the Missouri Valley, Dr. Lowry was honored with an invitation to attend this meeting. We expect a good report from Dr. Lowry for the next number of the Review.

While no one can regret that the next meeting of the American Medical Association is to be held in Denver, it is to be regretted that the choice of the nominating committee should have been influenced, as is reliably stated, by the offer by a railroad agent of passes to Denver to those members of the committee who voted to meet in that city.—Cleveland Journal of Medicine, July.

This is a contemptible insult to the gentlemen constituting the nominating committee, and belongs in the columns of a sheet run in the interest of political bums, and not in a medical journal that claims to be respectable. The venom of envy could not show itself more disgracefully.

Dr. Lanphear's paper, the American Journal of Surgery and Gynecology, comes out in a slightly new

Digitized by Google

form, the wide and narrow columns being discarded for a double column of equal width. It is a decided improvement.

Lanphear is evidently in the "reform movement" in more ways than one, for at the head of his editorial column he has this announcement: "The spelling found in this magazine is that voucht for by the most prominent educators of this country, and is recommended for general adoption." And then he goes to work and in part of the journal the headline contains "gynecology," and in part "gynæcology." On one page he evidently forgets that he is a reformer, and on the next he flounders around with such words as "punisht," "overworkt," and "accomplisht."

The British Medical Association will meet in Montreal, August 31 to September 3, and promises to be a most successful affair. Our Canadian brethren are making great preparations for the meeting, and will give the three hundred members who cross the Atlantic a royal good time in the way of excursions, etc., before and after the meeting. Among members of the medical profession of the United States who are to read papers are the following: Drs. M. H. Fussell, Philadelphia; Henry M. Lyman, Chicago; Wm. Pepper, Philadelphia; Alfred Stengel, Philadelphia; Allen Starr, New York; James Tyson, Philadelphia; James T. Whittaker, Cincinnati; H. O. Marcy, Boston; Thos. Cullen, Baltimore; H. J. Garrigues, New York; F. Henrotin, Chicago; Howard Kelley, Baltimore; and many others. The United States is well represented on the program.

Railroad Rates and the Secretary of the American Medical Association.—The subject of railway rates was ventilated with some feeling. In a discussion of the subject the secretary told his story of effort upon his part in this relation. Poor man! He has done the very best he could, but there is a prejudice against him which makes him worse than useless in this direction. Annually for years his friends have said: "Let him serve another year, and we will see that his resignation is tendered." But he don't fulfill their obligations, but continues to hang on, and on, and on. A useful secretary would long ago have secured satisfactory railroad rates.—The Cincinnati Lancet-Clinic.

The above is cruel, but all the same there is lots of truth in it. The fact is, "times have changed since we were boys," and the present age and generation are not satisfied with what has been. A change is needed in the American Medical Association in running the secretary's office, but there are other changes needed which are just as important. There is too much narrowness, too much bigotry, or, to be more polite, too much conservativeness in the association in many respects to suit the times. But give us a new secretary, and revise the code, and we will be satisfied for a starter. And the association will not meet west of the Allegheny mountains many times before we will get these changes. The new blood is beginning to make itself felt, and when we have instilled some pure, vigorous western and Rocky mountain blood next summer the association of a decade ago will hardly know itself. Give us a new secretary and blot out the code. Written rules of morals are not needed by gentlemen. Others won't use them.

Miscellaneous.

Mullein oil is an admirable remedy in earache, so common among children. A few drops in the ear at bedtime.—W. S.

Thiersch's solution, so much employed now in surgery, consists of one part of salicylic acid, eight of boric acid, and a thousand of water.

Dr. Weil states in the Practitioner that every form of vomiting during gestation can be relieved by a 20 per cent. solution of menthol in olive oil. Dose, 10 drops on sugar whenever nausea appears.

In using carbolic acid in infants, always be on guard against poisoning. The first evidence of poisoning is shown by the urine, which leaves a pink stain on the napkins after being exposed to the air for half an hour.

For Removal of Corns.—

℞	Acid salicylic	ʒ j.
	Ext. cannabis indic.	gr. x.
	Collodion flex	ʒ ss.

Sig.—To be painted over the corn, twice daily for three days, when an oil poultice is applied over night.

Hemorrhage.—An able surgeon never fears hemorrhage from an open wound. It is to him a frank enemy. Concealed hemorrhage is the thief that comes in the night. In large dissections ligate the larger central vessels in the wound, so far as possible, and many bleeding points may be checked by a single ligation.—Keen.

There was a man in our town
Invested all his health,
With madly avaricious aim,
To win the goal of wealth.
And when he had his wealth attained,
With all his might and main,
He vainly lavished all his wealth
To get his health again.—Ex.

External Hemorrhoids.—

℞	Fluid ext. hamamelis	ʒ j.
	Fluid ext. hydrastis,	
	Comp. tinct. benzoin,	aa ʒ ss.
	Tinct. belladonna	ʒ j.
	Carbolized olive oil (5 per cent. carbolic acid)	q. s. ad. ℥ iij.

M. Sig.—Apply often to the parts.—Adler, in Med. and Surg. Reporter.

The Prevention of Gonorrhea.—Blodasewski's method consists of instilling (not injecting) one or two drops of a 2 per cent. solution of nitrate of silver into the meatus after coitus, a third drop being allowed

Digitized by Google

to flow over the frenum. This is so simple that it can be carried out by any layman. Experimentation shows that a silver solution of this strength kills the gonococci.

For Asthma.—

℞ Ext. bellad. . . . gr. iv.
Sat. sol. potass. iod. . . ʒ ijss.
Chloroform . . . . . ʒ ijss.
Fld. ext. valerian . . ℥ j.
Mucil. acaciæ . . q. s. ad. ℥ vj.

M. Sig.—Shake well before using and take a teaspoonful in a wineglassful of water half an hour before meals and at bedtime.

For Chronic Constipation.—

℞ Tr. nux vom. . . . gtt. viij.
Tr. belladonnæ . . . ʒ ijss.
Inf. sennæ . . . . ʒ v.
Inf. columbæ . . . ʒ vijss.

M. Sig.—A teaspoonful before meals.

If the motions are drier than normal, a saline may be given at meal time in addition to the above.—Dr. C. B. Kelsey.

Colorless Iodine Ointment.—

℞ Iodi . . . . . gr. xx.
Potass. iodid. . . . gr. iv.
Sodii sulph. . . . . gr. xl.
Aq., q. s.

Rub the chemicals with the water until the solution becomes colorless. Then add:

℞ Adipis benzoati . . . ℥ j.

M.—Med. Rec.

An Application for Urticaria.—Gaucher (cited in the Gazette Hebdomadaire de Medecine et de Chirurgie for July 11) recommends this:

℞ Menthol . . . . . 1 part.
Chloroform,
Ether,
Spirit of camphor, . . aa 3 parts.

M. To be used as a spray or as a lotion. The part should then be dusted with powdered starch or zinc oxide.

The Creosote Treatment with Children.—Hock (Wiener Med. Blat.; Centralbl. fuer Innere Med.) uses creosote not only in tuberculosis, but also for persistent catarrhal phenomena after measles and whooping-cough, according to the following prescription:

℞ Creosote . . . . . gr. xv.
Cod liver oil . . . . . ℥ iij.
Sacch. . . . . gr. ¾.

M. From two teaspoonfuls to three tablespoonfuls to be taken daily.

A careful estimate shows that there are 1,300 physicians and two large free dispensaries in Columbus. The most reliable information (from the health office) shows that the population is but little over 100,000, making a proportion of one physician to 333 people. How teachers can encourage young men to go into such an overcrowded profession may not be hard to understand, and why they keep coming in can as well be explained by hard times as by any other cause.—Ohio Medical Journal.

Chronic Rheumatism.—

℞ Potassii iodidi . . . ʒ iij.
Vini colchici sem.,
Tinct. opii camph., . . aa ℥ ij.
Tinct. stramonii . . . ʒ vi.
Tinct. cimicifugæ . . . ℥ iij.

M. Sig.—A teaspoonful thrice daily.—Med. Record.

A New Remedy for Diarrhea.—In the intestinal antiseptic orphol (betanaphthol-bismuth) we have a remedy which gives the same good results as are obtained from the use of betanaphthol, without its drawbacks. It does not produce any burning sensation, and is easily administered, even to children. In the diarrhea of children it is especially serviceable. The dose varies from 1 to 5 gme. (15 to 75 grs.) per diem for children and infants. It may be given either with milk or honey. The noticeable good effects in these cases are that the stools lose their fetid odor, watery character, and green color. The dose for adults is from 5 to 10 gme. (75 to 150 grs.) a day. Good results have been obtained from its administration in the diarrhea of phthisis and typhoid fever in adults.—Ex.

Watt advocates (Charlotte Med. Jour.) the treatment of infantile diarrhea by a regime of boiled water, cooled to a suitable temperature and given in small quantities every hour or half hour, or as thirst demands, to the exclusion of all food, for eight, twelve, or even twenty-four hours. By diluting the irritating secretions, dislodging the debris of decomposed alimentary matter retained in the folds of the mucosa of the canal, increasing the pressure in the blood vessels, and dissolving the toxins attached to the formal elements, the ingested water carries away and eliminates the poison from the system, changes the morbid character of the stools, and effects a reduction of the temperature and recovery, especially when administered in acute cases at their commencement and in children not very young.

Treatment of Varicose Ulcers Without Repose in Bed.—With Aubouin's method the patient resumes his occupation without inconvenience or delay, and the dressings only need changing as the secretions find their way through the bandages. He first renders the limb antiseptic and dusts the ulcer with iodoform, xeroform of aristol, or dermatol, smearing the adjoining eczematous region with Lassar's paste (pulv. starch and white zinc oxid each 20 grams, vaselin 40 grams). After this Unna's glue paste, melted, is applied over the whole limb. (Formula: Water and glycerin each 80 grams, gelatin and zinc oxid each 20 grams.) A starched tarletan bandage is applied outside of this with moderate compression, and an outer bandage to prevent soiling, when the patient is dismissed to his usual occupation. The appearance of

Digitized by Google

pus is the only indication for a change of dressings. They are easily removed after soaking in a warm foot bath.—Presse Med.

The Founder of Guy's Hospital.—Guy, the founder of Guy's Hospital, in London, was as parsimonious in private life as he was munificent in public. A good story illustrative of this is told of him in connection with Johns Hopkins, one of his contemporaries, who was nicknamed Vulture Hopkins, on account of his rapacious mode of acquiring his immense wealth. On one occasion he paid a visit to Guy, who, on Hopkins entering his room, lighted a farthing candle. Hopkins, on being asked the reason of his visit, said: "I have been told that you, sir, are better versed in the prudent and necessary art of saving than any man living, and I therefore wait on you for a lesson in frugality. I have always regarded myself as an adept in this matter, but I am told you excel me." "Oh," replied Guy, "if that is all you came to talk about, we can discuss the matter in the dark;" and thereupon he blew out the candle. Struck with this example of economy, Hopkins acknowledged that he had met his superior in thrift.—Medical Record.

PHYSICIANS' AND LAWYERS' FEES.

An interesting case is on trial at Pittsburg, Pa. By the testimony of a physician, a plaintiff secured $6,000 damages for injury received in an accident. The lawyers took $3,000. The physician got nothing, and is now suing the lawyers for his fee, and each of the legal lights insists that the doctor's fee should come out of the other fellow's share.

A similar instance, barring the suit, occurred in this city. Not long ago a physician made affidavit to the serious injuries received by the plaintiff, and when summoned to court spent a day in answering useful and useless questions of the opposing lawyers for the munificent fee of $1.60, expert testimony not being allowed.

The finding in the case was decided by the doctor's testimony, and verdict with $6,000 damages given. Of this the lawyers took $3,000, and the modest claim of the doctor for $50 is yet unpaid.

There is too little consideration shown the medical profession by the legal. Should we desire their advice a retainer is demanded, while they feel entirely at liberty to take our time, utilize our records, and profit by our experience and advice with no thought of payment. It is for the good of our patient, you know; and we have knowledge of a case where a lawyer charged in his bill $25 for time spent in consulting a physician relative to the case, and yet declined to pay the doctor an office fee of $5.

Some one will arise in the ranks of the medical profession who will dare to say: "Five dollars, please, if you desire my advice in this case, and $50 if I am called to court."—Atlantic Medical Weekly.

There are many doctors doing this now, and all would do it if they were wise. The doctor can arrange the little matter of fee before going on the witness stand if he goes at it right. An unwilling witness is a very poor witness when the evidence is expert. A physician can be compelled to go on the witness stand for the same fee as any one else would get, but he cannot be compelled to know very much when he is on the stand. These remarks apply, however, only to civil suits for damages, or in criminal suits where the lawyers would be likely to get good fees.

THE TREATMENT OF DIARRHEA IN CHILDREN.

Mr. Langford Symes has an article in the July number of the Dublin Journal of Medical Sciences on the treatment of diarrhea in children. He strongly advises keeping the child quiet, and clean. The body should be kept warm, with the legs and arms wrapped in wool. The eruptions, excoriations, and irritations which nearly always accompany the diarrhea should be kept down by the aid of suitable powders, such as oxide and carbonate of zinc, with a little boric acid. He advises giving a purgative to stop the purging, the best, he considers, is castor oil. This he gives in a dose of a dram for a child one year old, and follows once a day with fifteen or twenty drops as long as the diarrhea keeps up. The other method of giving castor oil is the following prescription:

℞ Castor oil . . . . *m* v.
Mucilage of acacia . . . *m* xv.
Peppermint water . . q. s. ad. ℥.
M. Sig.—To be given every hour.

This is very soothing for young children. Another prescription for young children is as follows:

℞ Powdered rhubarb . . gr. j.
Sodium bicarbonate . . gr. ss.
Syrup of ginger . . *m* viij.
Peppermint water . . q. s. ad. ℥. M.

In regard to food, Mr. Symes thinks that pure milk is best, unboiled, provided its source is known to be pure, otherwise it is best to boil it before use. This, of course, applies in cities always. Concerning milk diet, the following is recommended:

First—Diluted milk. This in equal parts, or a third of pure water, breaks up the curd. Barley water makes the curd less firm. Soda water is excellent if the child will take it. Lime water is often useful, but a few drops of the saturated solution are best if lime is required medicinally. Plain boiled water is a good dilutant, or an ounce of milk, lime water, and boiled water.

Second—Humanized milk. This contains less curd and more cream. The only scientific way of feeding infants artificially is by regulating the percentage of proteids, fats, and sugar. The proteids should be kept at about 1 per cent.

Third—Peptonized milk.

Fourth—Condensed milk, if good.

Fifth—Sterilized milk. This is free from poisonous germs.

Sixth—Pasteurized milk.

Among substitutes for milk is raw meat juice, which is excellent for children; it is a good antiscorbutic. A teaspoonful may be given every four to six

Digitized by Google

hours, sweetened. White of egg diluted, or albumin water, is the white of an egg cut in various directions with clean scissors. Shake up in a flask with a pinch of salt and six ounces of pure cold water, strained through muslin and sweetened. This may be given alone or mixed with milk.

The following antiseptics are recommended to allay fermentation:

CALOMEL.—This should be given at once, with or after an initial dose of castor oil, frequently, in fractions of a grain.

RESORCIN.—From a half grain to five grains will be active in the stomach and in the upper intestinal tract. It is not irritating and is soluble and sweet. It should be continued after the diarrhea has disappeared.

BISMUTH SALICYLATE.—From 1 to 3 grains every hour.

BENZOL NAPHTHOL.—From 1 to 3 grains every hour. It is not poisonous.

SODIUM SALICYLATE.—From 2 to 4 grains every four hours will relieve gastric fermentation.

GLYCERIN OF CARBOLIC ACID.—From 1 to 4 minims; this may be usefully combined with castor oil.

NAPHTHALINE.—From 1 to 3 grains.

GLYCERIN OF BORAX.—Thirty minims.

Intestinal irrigation is well worth trying, but it must be high irrigation of the bowel with a soft rubber catheter. First wash out the rectum and then irrigate with a normal salt solution or boric acid solution. A small enema is of no use. Washing out the stomach is also recommended.

THE NEW TUBERCULIN.

The Deutsche Medicinische Wochenschrift, says the Berlin correspondent of the Lancet, contains an article by Dr. Bussenius concerning the treatment with Dr. Koch's new tuberculin. Nineteen patients were treated, twelve of whom suffered from laryngeal tuberculosis, two from pulmonary tuberculosis, four from lupus, and one from asthma. The duration of the treatment varied from twenty-nine to sixty-five days. When it was finished injections of the old tuberculin were made, with the result that none of the patients showed a reaction. In accordance, says the writer, with the recommendations of Dr. Koch, the injections were begun with very small quantities, and these were somewhat quickly increased, for Dr. Koch believes that reaction may be avoided in this way.

Dr. Bussenius found that the maximum dose was reached without febrile reaction in only four cases, while in the others the temperature generally rose after the injections. He stated that the fluid purchased from the Hochst factory seemed to vary in strength. For instance, the preparation issued on June 4 caused not only fever, but also other and undesirable symptoms, such as swelling of the lymphatic glands, debility, etc., but bacteriological examination, nevertheless, showed it to be sterile; the preparation sent out on June 11 caused fever, which was ushered in by a rigor and lasted about twenty hours, the patient's temperature being 106.3° F. In one of the cases of lupus the injection of a cubic centimetre of this tuberculin caused a swelling of the diseased cutaneous tissues similar to that observed with the old tuberculin. It was remarkable that the same patient had formerly received four cubic centimetres from another bottle without any reaction. This result showed that the technical details of the preparation of the tuberculin still needed improvement, in order that the product might be always uniform. Great precautions were still necessary when a fresh bottle was used, the activity of which was not yet ascertained. The pulse and the respirations became more frequent simultaneously with the rise of temperature; two patients complained of oppressive and excessive perspiration; disturbances of the digestion were never observed, and the appetite was not obviously influenced. In seven patients an increase in weight was observed, and in five a decrease, while in two it was not changed at all. None of the 334 injections was followed by suppuration, but in some instances there was an infiltration around the place of the injection, which passed off without treatment. As to the effect of the treatment on the local process, continues the writer, it was stated that in two cases of pulmonary tuberculosis complicated by syphilis the cough and excretion, where tubercle bacilli were present, very soon disappeared; in laryngeal and pharyngeal tuberculosis there was no obvious amelioration in any instance. The local reaction was very slight, and there was no danger of laryngeal edema, so frequent with the old tuberculin. The best results were obtained in cases of lupus. Two of the patients suffering from this disease recovered completely in seven and nine weeks, respectively, after the beginning of the treatment. In one case the healing went on very well and the greatest part of the lupoid area was in a state of cicatrization; but the injection, unfortunately, had to be stopped owing to the above described troubles due to excessive energy of the tuberculin. The fourth case of lupus was still in an early stage of the treatment.

Dr. Bussenius, continues the writer, is not yet disposed to give a definite opinion concerning the efficacy of the new tuberculin, but the results attained seem to fall short of the expectations of Professor Koch. Another short communication on the new remedy, says the correspondent, is made by Professor Schultze, of Bonn, who has treated nine patients up to the present time. The reactions so characteristic of the old tuberculin were never observed. In one case a laryngeal affection, probably of a tuberculous nature, made its appearance during the treatment, and the patient consequently refused to have the injections continued. Another patient, who suffered from diarrhea after the injections, lost four pounds and a half in weight and declined further treatment. In four cases there was no apparent alteration of the patient's general condition, in one case of pleurisy there was a general improvement, and in two other cases a marked amelioration of the laryngeal affection was observed. Professor Schultze said that it was quite impossible to determine whether the amelioration was due to the treatment or to the general hygienic and dietetic measures.

Digitized by Google

Society Proceedings.

The Southwestern Iowa Medical Association will meet at Osceola, August 19.

The fourth annual meeting of the Iowa State Association of Railway Surgeons will be held at Des Moines, October 13 and 14.

MEDICAL SOCIETY OF THE MISSOURI VALLEY.

The annual meeting of the society will be held at Council Bluffs, Ia., Thursday, September 16, 1897. The titles of papers must be in the hands of the secretary not later than August 26. Programs will be sent to members September 1. Donald Macrae, Jr.,
Council Bluffs, Ia. Secretary.

The Rocky Mountain Interstate Medical Society was organized at Salt Lake City July 24. It is to include all of the Rocky mountain region, and in this region will be found some of the best men in the country. Dr. C. P. Hough, of Salt Lake City, was elected president, Dr. C. K. Cole, of Helena, first vice president, Dr. Clayton Parkhill, Denver, second vice president, and Dr. E. Stevens, of Wyoming, secretary and treasurer. The next meeting is to be held in Denver, at the same time as the meeting of the A. M. A.

THE RUSH MONUMENT FUND.

Philadelphia, July 14, 1897.

G. H. Simmons, M. D., Secretary Nebraska State Medical Society—My Dear Doctor: At the recent meeting of the American Medical Association it was resolved that the secretary be directed to request each state medical society to appoint a committee to take charge for that state of the raising of the sum of $100,000 for the Rush monument fund. Several states were pledged to raise at least $2,000. This was deemed the best plan by which to raise an amount sufficient to build a monument to Dr. Rush which will be a credit to our profession.

Please notify me at your earliest convenience of the action taken by your state, with the names of the committee.

Yours very truly, W. B. Atkinson.

In response to the above, and for the purpose indicated, Dr. Bridges, president of the Nebraska State Medical Society, appointed the following committee: Dr. R. C. Moore, Omaha, chairman; Dr. H. B. Lowry, Lincoln, and Dr. E. M. Whitten, Nebraska City.

NEBRASKA STATE MEDICAL SOCIETY.

THIRTIETH ANNUAL SESSION.

The next meeting will be held in Omaha, commencing June 14, 1898. This brings it immediately after the meeting of the A. M. A. at Denver and probably an effort will be made to have addresses from one or more eastern men of reputation. A large number, after attending the meeting at Denver, will stop at Omaha to take in the great Trans-Mississippi Exposition, and the Nebraska society will hope to have some of these in attendance at its meeting. Dr. Willson O. Bridges, the president, has appointed the following:

COMMITTEES.

Arrangements—C. C. Allison, R. M. Stone, D. C. Bryant, Omaha.

Credentials—Geo. H. Simmons, ex officio chairman, Lincoln; First congressional district, J. L. Greene, University Place; Second congressional district, B. F. Crummer, Omaha; Third congressional district, P. H. Salter, Norfolk; Fourth congressional district, A. S. v. Mansfelde, Ashland; Fifth congressional district, F. A. Butler, Harvard; Sixth congressional district, F. D. Haldeman, Ord.

Grievances—W. B. Ely, Ainsworth; L. M. Shaw, Osceola; F. E. Beal, Papillion.

Necrology—W. M. Knapp, Lincoln; H. B. Wilson, Omaha; H. G. Leisenring, Wayne.

Auditing—H. M. McClanahan, Omaha; A. D. Nesbit, Tekamah; F. E. McKeeby, Red Cloud.

CHAIRMEN OF SECTIONS.

Practice of Medicine—B. F. Crummer, Omaha.

Surgery—A. R. Mitchell, Lincoln.

Obstetrics and Gynecology—O. Grothan, St. Paul.

Nervous and Mental Diseases—H. B. Lowry, Lincoln.

Anatomy and Physiology—J. T. Miller, Holdrege.

Ophthalmology and Otology—M. H. Garten, Lincoln.

Materia Medica and Therapeutics—Charles Inches, Scribner.

Medical Jurisprudence, Medical Chemistry, and Toxicology—W. A. Chapman, Hastings.

Pathology and Histology—A. S. v. Mansfelde, Ashland.

Public Hygiene and Medical Legislation—P. H. Salter, Norfolk.

Dermatology—C. D. Evans, Columbus.

Laryngology—J. C. T. Bush, Wahoo.

The book containing the proceedings for 1897 is now being distributed. Nebraska thus gets out her proceedings this year earlier than any other state medical society. These books should be in the hands of the members not later than the 21st inst., and I would ask those who are entitled to a copy to notify me if they have not received it by that date. All members in good standing are entitled to the volume.

Geo. H. Simmons,
Secretary Nebraska State Medical Society.

Board of Health Proceedings.

NEBRASKA STATE BOARD OF HEALTH.

MEMBERS—Dr. C. F. Stewart, Auburn, President; Dr. B. F. Crummer; Omaha, Vice President; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.

The Nebraska State Board of Health, at its meeting held August 5, granted certificates to the following:

Henry Le Roy Crummer, Omaha,
Chicago Medical College, 1896.

George E. Harrison, Omaha,
Bennett Medical College, Chicago, 1880.

Wm. Curry, Palmyra,
Rush Medical College, 1897.

E. D. Putnam, Stanton,
Omaha Medical College, 1897.

Digitized by Google

Paul H. Ludington, Omaha,
University of Pennsylvania, 1897.
Carrie L. Heald, Osceola,
Northwestern University Woman's Medical College, 1897.
Frank G. Snyder, Bradshaw,
Barnes Medical College, St. Louis, 1897.
John I. Clark, Craig,
Rush Medical College, 1897.
Robert I. Jensen, Minden,
Creighton Medical College, 1896.
Frank E. Kraft, Unadilla,
Omaha Medical College, 1897.
Jno. A. Lockard, Lincoln,
Bellevue Medical College, 1896.
E. Arthur Carr, Lincoln,
Hahnemann Medical College, Chicago, 1897.
A. E. Walker, Union,
Eclectic Medical Institute, 1897.

Henry R. Burner, Fairbury, of the Eclectic College of Pennsylvania, 1870, was refused. Several applications were postponed for further inquiries.

Books and Pamphlets Received.

Medical Legislation. By R. L. Thomson, M. D., being the president's address before the Washington State Medical Society. Reprint from the Medical Sentinel.

"About Children" is the title of a book soon to be issued by the Medical Gazette Publishing Company. The author is Dr. Samuel W. Ketley, professor of diseases of children in the Cleveland College of Physicians and Surgeons. The little volume comprises six lectures delivered before the nurses in the training school of the Cleveland General Hospital, and is filled with material of interest not only to nurses, but medical students and practitioners as well. Advance orders will be filled in September.

Surgical Treatment of Varicose Ulcers of the Leg. Contribution to the Surgery of the Carotid Arteries. Some of the Essentials of Successful Surgery. An Object Lesson in the Diagnosis of Appendicitis. Epilepsy Probably Cured and Paralysis Improved by Relieving Irritation and Compression Resulting from an Old Compound Depressed Fracture of the Skull, Replacing the Large Area of Depressed Fragments by Heavy Gold Foil. The above five reprints by John E. Summers, Jr., M. D., of Omaha, Neb., professor of the principles and practice of surgery and clinical surgery in the Omaha Medical College.

Surgical Hints for the Surgeon and General Practitioner. By Howard Lilienthal, M. D., assistant attending surgeon to Mt. Sinai Hospital, New York city, N. Y. International Journal of Surgery Company, 1897. Price, 25 cents.

In writing this little book the author's aim has been to present a number of observations and suggestions whose value has been thoroughly tested at the bedside and in the operating room. A review of its pages will show how much practical information he has conveyed within a small compass, and this he has been able to do by eschewing all superfluous verbiage and by writing clearly and to the point. The material is well arranged, the typography excellent, and the little volume is of a convenient size to be carried in the pocket and perused at leisure moments.

The McIntosh Battery & Optical Company, of Chicago, has just issued the eighteenth edition of its Electro-Therapeutical Catalogue, and it is not only a thing of beauty, but a joy for those who are interested in electricity. The name "catalogue" does not do it justice. It is much more than simply a catalogue of instruments and appliances, for it contains practically all the information on electricity in its various forms that the physician really needs for a general understanding of the subject. The article on "Fakirs and Faradic Fads" should be read by every physician who uses a battery. The book contains a valuable series of papers reprinted from the Bulletin of the electro-therapeutical laboratory of the University of Michigan; a paper on Electricity in Dysmenorrhea, by Dr. Franklin H. Martin, of Chicago, and many other really valuable papers. The book is free for the asking, for its primary object is to advertise the products of the firm which issues it, but for all that it is a valuable work for those who use, or expect to use, electricity.

General Harrison has just completed the revision of his articles which have appeared in the Ladies' Home Journal, making extended notes and additions to them. There is a little story in connection with both articles and publication. When the arrangement for the articles was made with General Harrison by Edward W. Bok, editor of the Ladies' Home Journal, the general was paid for them, with the understanding that when they were put into book form the magazine was to share the royalties accruing therefrom. Mr. Bok, however, of his own accord, generously released General Harrison from paying him any royalty, for the reason, as he states, that by the publication of the articles by General Harrison the subscription list of his magazine was enlarged many thousands. The profits to the Ladies' Home Journal were more than the publishers anticipated, and in view of this Mr. Bok asks nothing further. General Harrison placed the disposition of his book in Mr. Bok's hands. The best offer came to the editor from the Scribners, and to them Mr. Bok gave the book for his distinguished contributor. General Harrison's revision of the book has just been completed, and the volume will appear in the autumn.

ABOUT PESSARIES.—There is an impression among many students, and even with some practitioners, that a pessary is introduced to reduce a displacement of the uterus. This is a serious mistake. A pessary is only to retain in place, by a pulley-like action on the wall of the vagina, the replaced uterus. If a pessary be introduced while the uterus is retroverted, it tends to render the condition worse by converting it into retroflexion—the fundus bending over the posterior bar of the pessary.—Montgomery.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL II. No. 9. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. SEPTEMBER 15, 1897.

Original Articles.

SOME IRREGULAR FORMS OF PNEUMONIA.*

BY B. F. CRUMMER, M. D.,

OMAHA, NEB.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE, CREIGHTON MEDICAL COLLEGE.

Every young practitioner of medicine who is active in professional work has an experience which leads him to believe that an unusual number of exceptional or atypical cases of disease present themselves to his observation, and it is only after repeated experiences of this kind, and perhaps several years of active work, that he begins to cultivate a spirit of reserve in the early diagnosis of disease at the bedside, and to exhibit an increasing confidence in that old pessimistic maxim that "it is often (in medicine at least) the unexpected that happens."

After all, if every disease that comes before us for diagnosis presented a set of constant and unvarying symptoms, the practice would lose a certain interest which it now possesses because of its freedom from machine-like precision and mathematical exactness.

While many of our acute affections, and some chronic ones, present these exceptional forms or types which violate all rules about symptoms and physical signs, it is, perhaps, in pneumonia that some of the most striking examples occur, and to these my paper will briefly refer.

Nothing in the range of acute disease presents a more striking picture to the observer than the average typical case of lobar pneumonia. The flushed cheek, the bright eye, the dilated nostril, and the rapid, catchy respiration, following closely upon a severe chill, often enable the lay friends of the patient to make an accurate diagnosis before the physician arrives. But when we remember that the same pathological condition may exist in certain instances without any or most of the ordinary symptoms and physical signs, we are at once warned to be constantly on our guard, especially when dealing with patients of advanced life or those of impaired vitality.

These cases of atypical pneumonia are, indeed, best exemplified by the senile form, in which symptoms and physical signs are either delayed or entirely absent, but they are not confined to the aged. I have seen a number of cases occurring in earlier life, where the symptoms and physical signs were slight, perhaps contradictory, delayed in development, or to some extent absent, this irregular course being due to some constitutional defect or dyscrasia. It is well known that an insidious form of pneumonia comes on in certain cases of chronic nephritis, and the same is true of other conditions which produce profound constitutional changes, no matter what the age of the individual. Conversely, people of advanced age may present all the symptoms and physical signs of a frank lobar pneumonia. My experience is that a majority of elderly people have their pneumonias about the same as younger people do, so that the term "senile pneumonia" after all applies only to the exceptional cases. But when they do occur they are prone to deceive even the careful practitioner. Professor Tyson says that it is never safe to decide against a lobar pneumonia in an old person at the first visit, because the symptoms are obscure and the physical signs absent. Further, that "pain is especially absent in old persons," also "cough and expectoration," while the "pulse is rapid and feeble instead of full and strong."

There are certain facts pertaining to the history of this disease which should be carefully kept in mind, and perhaps the most important is that some of the most common symptoms of pneumonia are due, not really to the disease per se, but rather to its concomitants. Thus, the cough is apt to be proportionate to the amount of bronchial involvement, and the presence or absence of sharp pain depends upon the presence or absence of pleurisy, in a given case. Now, the absence of bronchitis in senile and other forms of atypical croupous pneumonia is the rule; hence the practical absence of cough and expectoration.

In my experience, pleurisy, another quite common accompaniment of typical lobar pneumonia, is either absent in the senile form, or comes on late, as in one of the cases here given, on the fifth day. These peculiarities are probably due to the central location of the consolidated area. Then the fact that the affected portion may be small in extent and overlaid with healthy lung accounts for the lack of physical signs. The fremitus may not be increased, and percussion and auscultation may not be modified until several days have elapsed.

Some early experience warned me that a certain set of symptoms pertaining to the nervous system are very suggestive of insidious pneumonia, and of value in diagnosis in the absence of physical proof. Especially are certain forms of delirium and symptoms of profound asthenia valuable indications.

An elderly person rises at night, becomes confused, and wanders about the house, or out into the open air. There has been no cough, no chill nor fever, nothing to attract attention to the fact that the patient is ill before his time. Perhaps the mental confusion can be

*Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

overcome by an effort. Sometimes the symptoms assume a form of hebetude or partial coma, and suggest a condition like uremic poisoning. Again, as in one case cited below, symptoms of profound brain disturbance, with hemiplegia, or at least hemiparesis and constant restlessness and jactitation, exist and totally obscure the lung lesion. Now, if by an examination of the urine we can eliminate uremia, and can find no real evidence of an organic affection of the brain, we may at times diagnose pneumonia with safety in the absence of physical signs in the chest, especially if the thermometer in the rectum shows a moderate increase of temperature. The surface of the body in these cases is usually cool, and this adds to the obscurity of the illness.

In the cases given below I will omit tedious detail and only refer to the features that have a bearing upon the subject under consideration. I once called upon a medical friend in a neighboring city and found him reclining in bed. He was about fifty-two years old and led a very active life. He had been in the house for four or five days; no chill, his highest temperature 102.5° F. He said: "I believe that I have pneumonia, but I have coughed but once, have had no pain, and my medical friends can find no physical signs of trouble in my chest." Upon sitting him upright and making forcible percussion, distinct dullness over a limited space near the angle of the right scapula was elicited. It had required four or five days' time to render any physical signs available, and symptoms, excepting a feeling of illness and prostration, were absent. Recovery was by lysis in this case, some four weeks elapsing before the consolidation cleared up entirely. I think that few of these cases of central pneumonia terminate by crisis.

In 1895 Dr. Knode was treating a lady of 60 for a catarrhal trouble of the throat. Being a neighbor, he had called at her house, but observed a feverish condition and anorexia beyond what the throat trouble would explain. I saw her about the third day of this illness, and while there was but little cough, no pain, and the respirations not above twenty-four per minute, physical examination gave sufficient evidence of a pneumonia, which ran a rather slow course and ended in recovery. Here the physical signs only became well defined at the end of a week.

Four years ago I was attending, during the winter season, a lady 66 years of age with a Pott's fracture. On the sixth or seventh day after the receipt of the injury I took Dr. Riley to the house to assist me in putting on a permanent dressing. The case up to this time had run a perfectly normal course, but we at once noticed that our patient seemed sick and was breathing rapidly. A careful physical examination demonstrated consolidation of the lower lobe of the right lung. We did not apply plaster dressing and the case went on rapidly to a fatal termination.

Another case associated with a fracture is the following: A lady of 70, feeling some slight indisposition during the night, arose and walked through the hall to the bath room. Upon attempting to return to her bedroom she became confused, turned the wrong way, and fell down a flight of stairs, sustaining a fractured clavicle. I dressed this with a mild form of fixation and kept the patient in bed. In a day or two I noticed that the temperature was a degree or two above normal, and that the patient showed slight mental hebetude, had a furred tongue, and was taking little nourishment. There was nothing to call attention to the chest. Three days later these symptoms were accentuated, and there was evident aberration of the mental faculties, forgetfulness, slow perception, etc. About this time, or one week from the receipt of the injury, there was developed a slight pleurisy, and an examination of the chest now unlocked our diagnosis. She had a well-defined dull area in the right lung, which, central at first, and later extending to the surface, gave rise to pleurisy. The case went on to a fatal termination in twelve or fourteen days.

Now in the first case, the Pott's fracture, there is no doubt but the pneumonia came on after the injury as an indirect result of the depression and nervous shock of the accident, the chill being absent, as often occurs in old persons, and, according to Tyson, also in drunkards. But in the latter case, I believe the whole history shows that the patient's fracture was merely incidental to an insidious or migratory form of central pneumonia, attended early by a form of mental confusion that caused the patient to rise in the night, a most unusual thing for her, and to lose herself and fall in attempting to retrace her steps.

Last winter Drs. Gilmore and Hoffman saw a Jewish gentleman of 70 years with me about the twelfth day of his illness, and one day before its fatal ending. The history was quite interesting, because typical of a certain small class or division of these senile pneumonias.

The patient was of thin, spare habit, with rather hard arteries, and was accustomed to a good deal of alcohol and tobacco. He became restless, slightly delirious, with a tendency to night vigils, and complained of some headache for two or three days before I was called. He now presented slight aphasia, dilatation of the right pupil, paresis of the left arm and leg, and pretty constant restlessness. He was stupid and could only be induced to answer questions occasionally after being thoroughly roused. There was partial retention of urine, requiring catheterization, and the urine contained a small amount of albumin. The hemiparesis varied from time to time, and was most noticeable from the constant movements of the right arm and leg, while the left members lay flaccid. He constantly threw the bed clothes off, and at times it required the services of two persons to hold him in bed. During this time there was a slight increase of temperature—100° F. to 101° F., and the pulse was rapid and rather thready. No cough occurred at any time. About the eighth day of the illness it was noticed that he breathed rather more rapidly and was somewhat cyanosed. A slight dullness, which had been noticed from my first visit, and which, in view of the prominence of the nervous symptoms, was considered of secondary importance, was now found to have extended so as to involve nearly the whole of the lung, thus showing that the disease was undoubtedly pneumonia of a masked form from the outset. The patient died about

Digitized by Google

the thirteenth day of the illness from asthenia, the paralysis not having increased much, and the pupils toward the last becoming more normal.

The co-relation of meningitis and pneumonia is perhaps more common than is usually supposed. Professor Tyson says it is found in 10% of all cases. There has long been some controversy as to whether in these cases the meningitis is primary or secondary. It seems to be now well established that while a secondary form of meningitis does occur late in pneumonia, from embolism, due to vegetations in the heart, and thrombosis of the pulmonary veins, yet a large proportion of these meningeal troubles are due directly to the irritation caused by the pneumococcus of Friedlander, and that it is often merely a matter of chance which locality they invade first. A number of years ago, while cerebro-spinal meningitis was epidemic in the locality where I lived, I saw numerous cases of combined pneumonia and meningitis. In the majority the lung symptoms preceded the cerebral trouble. On the other hand, I have seen a young man of twenty-two become comatose within an hour of the beginning of his attack, with retraction of the head, then rapid infiltration of the lungs, and death in two or three days. Eichorst claims to have found the bacillus lanceolatus in the purulent meningeal exudate in these cases.

This would explain the close clinical relationship of cerebro-spinal meningitis and croupous pneumonia, and explodes the old theory of metastasis, such an explanation of transference of disease being no longer tenable in the light of bacteriological investigations.

THE DOCTOR AS AN EDUCATOR.*

By J. LUE SUTHERLAND, M. D.,
GRAND ISLAND, NEB.

In presenting for your consideration and criticism a few rambling thoughts on the subject of "The Doctor as an Educator," I wish to say in the beginning that I am from choice a member of the medical section. This is the important section, and naturally is composed of the better educated members of the society. For while each and every member of the society is a surgeon, we, the voluntary members of the medical section, are something more—"we are doctors, also." We belong to that class of medical men who believe, unpopular though it appears to be, that there are yet battles to be fought and won without the aid of the knife alone; that there is yet one way, at least, to lives of usefulness without literally carving our way to "fortune and to fame;" that we do not lose all interest in a patient as soon as we become convinced that he is in greater need of medicine than mutilation. Our importance to the people must ever be in proportion to our ability to meet the demands they make upon us. To us the great and important questions of state medicine and sanitary science are especially referred. The success with which these two vital problems are to be solved, the deductions therefrom carried into effect, and the magnitude which they are to assume as health-saving and life-prolonging measures depend almost entirely upon us. To us the people look for protection from the ravages of plagues and pestilence. It is to us they look for pure food and pure water, healthy meat and wholesome milk. It is to us that future generations look, not only for sure and safe guidance into the world and life, but if we will listen we can hear the cries of millions yet unborn appealing to us for the single chance for their lives; to rescue their mothers from the mutilating hands of the over-ambitious members of the surgical section. It is to us the entire world is looking for its future population, and because all others have refused to assume the responsibility, it is left for us to teach the young girl who is a fine literary scholar, an accomplished musician, a competent teacher, an expert accountant, an efficient saleslady, etc., that there are yet three accomplishments which she must acquire before she has fulfilled the mission for which she was created, namely, an honest wife, a competent mistress of a home, and an intelligent mother. It devolves upon us to enlighten society as to the fact that the giving birth to children by the ladies of refinement and culture is not a disgrace, and that the intelligent rearing and training of the children of the household is almost as important as the giving of afternoon teas and midnight whist parties, much of the lay press to the contrary notwithstanding.

While the members of the other section are busying themselves with steel sounds and urethretomes, we can to much better purpose impress upon the minds of the youth of our land that gonorrhea is much worse than the worst "bad cold" it is possible to imagine. It is for us to teach them that there is but one cure for this disease, and that is never to acquire it. We often see the card in the daily paper, "Private diseases a specialty. Satisfaction guaranteed." This always seemed to me a special inducement for people to contract venereal diseases, a standing invitation, as it were, to unchastity. Could the baneful effects of this loathsome disease be confined to the guilty, it would be a matter of less importance, but when we so often see among its victims the virtuous wife and innocent offspring, we can scarcely overdo the matter by continually sounding the notes of warning until the laity have correct views as to the dangers, both immediate and remote, which threaten them from this source. While the other section is dilating strictures and incising the membranous urethra, we can occupy our spare time in teaching the young men who are determined to sow their wild oats a quicker and more honorable way to suicide.

Neither time nor space will admit of enumeration in detail all of the many problems that are now more than ever confronting medical men, but the brief mention of a few may not come amiss here. Alcoholism, with its attendant and widespreading evils, the laxity of our marriage laws, the pernicious methods adopted in our public schools, the prevalence of criminal abortion and other crimes arising from the same cause, the overweening desire on the part of the people for quackery in everything pertaining to the treatment of disease, the sublime faith with which they swallow Hood's Sarsaparilla, Paine's Celery Compound, and Kickapoo Indian Sagwa, and flock to the catarrh

*Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

specialist, "or five dollars per month by mail," "treated in their homes," etc., are some of the questions which should concern us.

I need not remind you that this attitude which the general public has maintained toward the medical profession since the time that a certain dirty-faced man was commanded to go and wash his eyes, down to the days of Schlatter by the roadside in the progressive little city at the foot of the Rockies, is simply the result of acquired ignorance, for much of which the medical profession is responsible. By the term "ignorance" I do not mean the absence of knowledge so much as the acquisition of knowledge that is erroneous. Hence, if we would have the people properly educated in all matters pertaining not only to our profession, but to the mutual welfare of all, this education must come from medical men. But, sad and humiliating as is the admission, much of the education emanating from medical men, some of whom are within our own immediate ranks, is anything but proper; but of them and their methods I shall have something to say later on.

Important as these questions are, vital to our mutual interests as they are, and in keeping with the present tendency of the profession toward preventive medicine, is it not strange indeed that toward them the profession as a whole has hitherto maintained a stolid indifference? If the inebriate, before he has learned the taste of alcoholics, could be accurately taught their baneful effects, not only upon himself, but upon his posterity, "even to the third and fourth generation," he would be slow and cautious in becoming acquainted with the intoxicating cup. If we took pains upon every occasion to instruct the laity as to the direful results of permitting the epileptic the tuberculosis, the syphilitic, the paranoiac, the inebriate, and the criminal to marry and beget their kind, the people would rise up and demand of our legislators laws prohibiting such marriages. If the superintendents and principals of our common schools were educated as they should be they would cease to measure the capacities of the various pupils by a single standard, and as a result the number of physical, and we may as well add mental, wrecks who graduate from our high schools would grow beautifully less with each succeeding year. As our schools are now conducted, mental attainments only are considered. There is but one standard, by which all are gauged, and woe to the boy or girl who fails to "pass." Further comment is unnecessary.

If we took a little time now and then to instruct both men and women as to all that is meant by, and included in, criminal abortion, and picture to them in all its desolation the loneliness of a childless old age, I believe it would be time well spent. At any rate, each one of us should so inform our patrons upon this subject that none of us will ever feel called upon to apologize for refusing to commit an abortion; and yet we are only too well aware that such will never be until the people are so educated as to never wish to have such an operation performed. What are we doing as individuals toward carrying forward this education?

But as to quackery, the Lord help us! How can we hope to educate the people against that which so many of our number practice daily? We meet year after year, and some of us many times a year, in our societies. At these meetings numerous scholarly and instructive papers, upon all kinds of medical subjects, are read and discussed. We spend considerable sums of money annually in supplying ourselves with the latest books and periodicals. We shut up our offices for a month or two each year to go to some medical center in order to study and brush up,—and what is our reward? Simply the consciousness of having done our duty. Nine-tenths of the people continue as before to patronize the mushroom doctor, the latest arrival in the place, or one who takes especial pains to inform his patrons, and every one else who will listen, that he is too busy to attend medical societies or read medical journals. And a large majority of those who sit in judgment upon our qualifications, and thus regulate the amount of patronage we are to receive, implicitly believe that while surgery may require some knowledge and training, all that which pertains to the treatment of disease or the giving of medicine is a natural gift; and that it exists in as high a degree of perfection in the untutored and unwashed savage as it does in the most profound medical scholar. While equally as great a number believe that a medical society is only another name for a medical trust, whose sole object is to protect the individual interests of its members and raise the fees. Witness senate chamber of our state legislature, March the 1st of the present year.

Does any one ask how physicians foster and encourage such beliefs among the laity? We have a code of ethics which explicitly says: "It is derogatory to the dignity of the profession to resort to public advertisements or private cards or hand-bills inviting the attention of individuals affected with particular diseases, etc." And yet such things are done, and if they were limited to private cards the offense would not be so great. But what of the reading notices in the daily paper, with a long and carefully worded write-up describing in minute detail some ordinary surgical operation, but in such a manner as to make it appear nothing short of a masterpiece; lauding the operator to the skies and enlarging upon the great benefits thus secured to the patient; and yet in some instances before the paper in which the write-up appeared had reached its usual number of readers, the patient had passed over to the great majority, where the "Bracelin cure" for consumption is not needed, and the six-weeks specialist is out of a job. Of course there is a difference between such a method of keeping one's name and business before the people and that of the blatant institute advertiser, but the difference is in favor of the latter, and how are the people to distinguish between the two? While whole lifetimes of conscientious, ethical men cannot raise the entire profession to a high and pure atmosphere of intellectual and ethical security, the irregular conduct of one or two professed regular physicians is amply sufficient to bring into disrepute the entire profession in the community where their acts are known. Who has not heard,

Digitized by Google

more than once, "O, they are all alike, only some succeed in concealing their true characters better than others"? And thus, as it too often is in other matters, the innocent suffer more than the guilty.

The present tendency of the short term recent graduate to rush into surgery, upon the slightest pretext and every occasion, has not only a depressing effect upon general practice in the estimation of the laity, but makes the way difficult for the legitimate surgeon, who, through years of patient study and original research, is not only a skillful operator, but a good diagnostician also, and upon this account is in every way worthy of his title. In short, the surgical temperature is at present above the healthy normal, not only in our own state, but throughout the entire west. In proof of this, a poll of the attendance in each of the sections will show the surgical to outnumber the medical by a good majority every day of the session. A pair of healthy ovaries, or even a healthy appendix, on a plate and passed around while listening to a minute account as to how the operation was completed from start to finish in "seven minutes and nineteen seconds," and the patient lived, possesses a fascination for the average practitioner in comparison to which the most masterly papers on How to Reduce Infant Mortality, The Early Diagnosis and Treatment of Typhoid Fever, What of the Future as to the Water Supply, and The Disposal of Sewage in Large Cities? etc., pale into utter insignificance. Is it not worth while that the laity be taught that accuracy in diagnosis, skillful and scientific management and rational treatment of disease, with all the organs intact, requires almost as good a brain and as much training as it does to make a conditional diagnosis, advise, and make an exploratory operation. If we would do our whole duty toward the public, and thus command the respect and appreciation which is due to us; if we would realize to the fullest extent all that is possible within the scope of the noblest profession, occupation, or calling upon the face of the earth; if we would place it within our power to do the greatest good to the greatest number, we must so educate the people by word and deed that they will be won over to believe that which we ourselves believe; but this we will never accomplish if we profess one thing and practice another. Is not, then, the proper education of the people along these lines well worthy of a part of our time, and has it hitherto received the attention its importance demands?

CHILLS IN TYPHOID FEVER—A CASE.*

By J. F. STEVENS, M. D.,
LINCOLN, NEB.

Much of our success depends upon our ability to correctly interpret symptoms, and this ability becomes of paramount importance when, in the course of a disease, new symptoms arise which point either to a direct result of the malady or to some intercurrent disorder. The average physician gets on very well in the treatment of uncomplicated cases of any described disease. But how often does it occur that an avalanche of the unexpected sweeps away not only the patient, but, incidentally, at the same time much of our reputation. This alone is deemed by the writer sufficient reason for presenting the following case, together with some observations as to the necessity of correctly interpreting the significance of a chill or chills occurring in the course of typhoid fever:

J. W., aged 24, was admitted to St. Elizabeth Hospital, October 16, 1896. He had been confined to bed two weeks previously, and had come by rail twenty miles the morning of admission.

Condition Præsens.—Temperature 101, pulse 106, respiration normal; considerably emaciated; tongue dry and brown in center, moist on edges; entire buccal surface, fauces, and pharynx inflamed, with many ulcerating patches; voice hoarse from evident extension of surface inflammation into larynx; slight tympany, with very little tenderness on pressure; slight looseness of bowels; a few rose spots; chest sounds normal; patient very weak and with a pinched look on face. Diagnosis, typhoid fever, at end of third week. Previous treatment unknown.

During the first two days temperature reached 103° in the evening and dropped to 101° in the morning. On the evening of the 19th it dropped to 100°, reaching 103° again on the evening of the 20th. During the night of the 21st patient was seized with violent chill, lasting one-half hour. Morning of the 22d found him with a temperature of 96°. Pulse slow, steady, and full, face pinched and an aspect of general weakness. The temperature rose steadily until on the morning of the 23d it was 100.6°. There were several chills on this day, and a violent one during the afternoon. By evening the temperature had fallen to 95°. Pulse slow and full, respiration normal. Patient reacted and temperature fluctuated upward until by the evening of the 25th it had reached 102°. Voice weak and general condition worse. On the morning of the 26th a chill more severe than any of the others occurred, the temperature falling, however, to only 101°. For the first time the pulse was quickened, reaching 160, and after remaining at that point for several hours dropped to 140, but was variable and uncertain. On the morning of the 27th temperature was 99.2°. In the evening the steady, rapid sinking of the last two days terminated in death, with a temperature of 100.6°. On the morning of the 20th the left leg presented the usual appearance of thrombus in the femoral vein.

Autopsy revealed no hemorrhage, abscess, or other lesion which might directly have caused death. There were no adhesions anywhere, either in abdominal or chest cavity. The omentum and mesentery had nearly disappeared. There were but few enlarged glands. Section of the bowel revealed extensive and deep ulceration, the patches varying from one-fourth inch to one and one-half inches in diameter, and in many instances reaching the peritoneum. At one point the bowel was stained a bright yellow from fecal matter, which evidently had gained entrance through the ulcer which marked the center of the dis-

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

coloration. This stained patch comprised a section of the ileum about seven inches in length. Death had evidently been caused through absorption of putrescent material at this point.

Strangely enough, in standard works on practice almost no reference is made to chills, excepting as a very early symptom, and reference is usually made to "shiverings" or "chilly sensations." Gregory, in 1826, mentions a cold stage sometimes occurring in typhus abdominalis, but drops the subject as of little importance. Elliotson, in 1839, tacitly refers to a chill in complicating pneumonia. Watson omits the subject altogether, but Niemeyer, that wonderful observer who let nothing escape detection, in 1870 says: "We may look for the approach of death if the temperature suddenly falls very low—say to 94°." He also mentions a fall of temperature as accompanying hemorrhage of the bowels, and refers to chills in various complications. Flint, in 1880, states that a sudden fall in temperature, other symptoms not favorable, may denote hemorrhage, and says a considerable decrease of temperature below normal is ominous.

Osler, in 1895, reported eleven cases of typhoid fever complicated with chills which he had specially studied in Johns Hopkins Hospital, and made probably the most valuable clinical addition to this subject we possess. Usually death occurring in the course of typhoid fever is due to some complication—very few die from exhaustion when the malady pursues the classical course described in the books. A chill or chills occurring after the initial symptoms have passed by, in the writer's opinion, always demand the most careful study of the case, and if the cause be not moral, i. e., from nervous excitement, objective in nature, some new enemy to life will be discovered side by side with the foe that has already engaged our attention.

A common opinion has been that malaria is the usual cause of rigors, but recent investigations have proven that, while this may occasionally be the case, as a rule it is not. Only an examination of the blood will decide positively. The unwise administration of antipyretics, especially the coal tar derivations, will occasionally produce a profound depression of temperature. I remember once sitting up all night with a patient collapsed with ten drops of guaiacol painted over the abdomen, and coaxed into the system by means of an overlaying poultice. Suppurative inflammation of the middle ear, meningitis, pneumonia, pleurisy, pyemic abscesses of the kidney, abscess of liver or spleen, suppuration in the mesenteric veins, perforation of the bowel, thrombosis of the saphenous or femoral veins, acute periostitis, all may be, and perhaps usually are, ushered in by a rigor or rigors. A violent chill, followed by hyperpyrexia and death, may be considered as an almost certain indication of the absorption of putrescent matter in the bowel, and, indeed, it is fair to suppose that nearly or quite all of those cases of death otherwise unexplainable are caused in this way. In conclusion, let me repeat—a chill or succession of chills occurring in the course of typhoid fever is a matter of sufficient gravity to command immediate attention on the part of the attending physician.

OBSTETRICS.*

By VICTOR H. COFFMAN, M. D.,
OMAHA, NEB.

The aborigine, whose lying-in chamber is an unprovided tepee or a halt on the wayside during the march, unaided and alone, endured and underwent the physiological process of labor or travail, dividing the umbilical cord with her teeth while she waited for nature's contractile force of the uterine muscles to expel the placenta, arising from the knee-chest position to resume the march or to do duty in the camp, allowing the blood to escape at will—no binder or napkin to dam the blood, and later on the lochia in that cavity, canal, or slough of despond, till deprived of its native power of protection, till the infecting germs of sepsis proliferate and invest the generative field. Here we have no record of puerperal fever or meddlesome midwifery. To the credit of nature's antiseptic (fresh blood) must we ascribe this protectorate. Contrast, if you will, modern civilization, aided by the edict of the accoucheur that the recumbent posture must be maintained at all hazards, and the bed-pan must be used when the bowels and bladder come to be relieved. Under all circumstances this, too literally carried out, is to be condemned. Let your patient have the luxury of a commode, or let them turn over on their knees and place a vessel between their thighs, and allow clots and discharges to pass from the vagina, reserving the douche of sterilized water for cleanliness, and permanganate of potash—1-1000—for disinfecting when necessity is evidenced by the odor of decomposition.

"Suffer little children to come unto me, for of such is the kingdom of heaven," and the world. The savage did not take her new-born, unstripped, upon her knees and lather it with soap and rub it until its skin resembled a fresh lobster. Nor did its cries and screams for mercy and pity remain unheeded, as they do by our graduated, scientific nurse. If its swaddling clothes were not the finest, probably the leaves of the forest or grasses of the plain were its first protection. No skin diseases or eruptions, for soap is unknown to this dusky nurse of untutored mind. It were better for modern civilized early life that it should be omitted, for the cruelty to the newly born (unintentionally inflicted) is unequaled in any other part of life.

Then how and what to do? Though seemingly presumptuous to insinuate even a suggestion for the comfort and protection of infantile life, since it is proverbially sanctioned by acquiescence that old women know enough to take care of children, and how often intelligent—no, not intelligent, but educated people—declare that they submit their children to homeopathy, but for themselves, they take theirs straight—excuse the digression, for my sympathy is enlisted in the behalf of helpless humanity. The first attention to the child should be given to its eyes, bathing with clean water and applying a bandage over the eyes, to be retained till it is washed, and if it is ever to have a general bath, now is the time. With covering still around it, it is immersed in a bath the temperature

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

of 100°, using the yolk of an egg in the water—barring soap.

The mother now claims our attention. The laws of nature are inevitable; their violation, certain destruction. Relentless progression in human endeavor has effected a transformation, converting the obstetrical to a surgical equation, and the laws of surgery apply henceforth. As Billroth wisely puts it, "medicine becomes surgical."

First, the immediate repair of the perineum, however slight the lesion; second, avoid obstruction to drainage—auto-infection from rectum and bladder, preferring antiseptic enemas into the bowel instead of vaginal douches exclusive, not forgetting to apply to the nipple antiseptic dressing, for many a case of suppuration of the mammary gland has its origin in an abrasion of the nipple.

Post-Partum Hemorrhage.—May it not be practicable to recognize the predisposition to post-partum hemorrhage? Being forewarned, it is possible to be forearmed. Instead of the kidney being the sole organ to stand the brunt of puerperal accidents, the liver is an undoubted accomplice. 'Tis an acknowledged fact that the condition recognized by cholemia favors toxemia, which predisposes to hemorrhage. Then, instead of relying on a fancied security in the administration of ergot, a wise security would be a preparatory dose of calomel, gamboge, and nitric acid, correcting derangements of the hepatic functions prior to labor. For the hemorrhage, the established rules should guide our actions.

Puerperal Eclampsia.—Manifold as the causes are leading up to prominent symptoms of a lesion, none are more perplexing and past finding out than that which causes a succession of discharges of nervous force in convulsions, resulting in puerperal eclampsia. Discarding all theory and modes of treatment, none of which are classical or reliable, I desire to impress with firm conviction that there is a "balm in Gilead" (first avoid forcible dilatation to aid rapid delivery, and be more than guarded in the administration of chloroform, if used at all), and this is in the administration of oleum tiglii (whether at full term or any prior stage of gestation). Five to ten drops of croton oil in olive oil, repeated if necessary, will do more to arrest convulsions and produce dilatation and expedite labor than all other methods in vogue, and after delivery is accomplished, making it possible for auxiliary treatment and restoration of health. Thus, in brief, are my views and practice, not condemning other methods.

The Forceps.—In forceps delivery a warning only I offer, and that is not to leave the head resting too long in the pelvic cavity, guarding against too strong compression of the head, for you are using an engine of immense power. Therefore, summon all your learning, experience, and art in your skill for this process, for it is the acme of all good and great and appreciative assistance rendered the mother, and the security to the life of the child and its future well-being. To the mal-use of the forceps is due the increase of puerperal fever. Therefore, my only suggestion in aid of the skill of the individual operator is the use of the liquid paraffin oil as an agent, aseptic and antiseptic, for lubricating obstetrical forceps and the hand in forceps delivery. Try it. It will not disappoint you.

Electricity in "Extrauterine" Pregnancy.—The day has come with evidence in favor of this method of treatment. Its early application, its freedom from injury, no barrier to laparotomy when the surgical necessity arises, all welcome its advent. Likewise, it is still in evidence for the arrest of uterine fibroids. For its proper and judicious management you must learn from other evidence and authority, and I cite you to a work of Dr. Martin, of Chicago (Electricity in Obstetrics), as well as other authorities of acknowledged credibility.

Vomiting in Pregnancy.—Whilst electricity is not the only means at our command for the relief of vomiting in pregnancy, yet it will aid our efforts ofttimes to success. This condition is one of pitiful dependence on the obstetrician, and the question arises, Shall artificial labor be produced? My judgment and experience say, "Nay, nay, Pauline," for they who try it, as a dernier ressort, will book another passenger on Lethe's stream, to his chagrin and humiliation. Then what shall we do? is the cry. I have only to add my experience in the administration of croton oil —three to five drops in olive oil, after all things else had failed, has acted like a charm. In many cases of this reflected trouble it will tax your ingenuity to its limit; therefore, hesitate not to run the gauntlet of all that is known, and above all a strict adherence to frequent feeding—for alimentation must be kept up, be the method what it may.

A biblical command, "Multiply and replenish the earth." Is there no end to this injunction? May we not modify this to suit ourselves and the condition available for physical perfection and development? Man propagates and his progeny comes forth to find the law, "survival of the fittest," dominant. I believe it practicable to limit procreation. Is it man's mission on earth to add to the population, irrespective of quality? Is the woman the slave of lust, and must she be defenseless against this tyrranical abrogation of her rights? The non-proliferation of offspring should be elective in another mode than celibacy and domestic onanism. Then what should be its restrictions. Nature has in evidence pairs—male and female—in equal numbers and proportions, and it is altogether proper, physiologically speaking, that this pairing process should be, literally, mating. Can there not be fraud practiced in this sphere, rendering an injustice that rebounds to society with an eternal force? It is of recent history that learned jurists find authority in their mission of protection, interposing a barrier to that which would seem destructive to individual rights, by refusing to perform the functions of their office in the routine of a marriage ceremony. How much more appropriate and humane for the obstetricians to anticipate the evil which is to follow, if by offering advice to prevent this union, and, if unheeded, arrest its destructive influences in prevention of conception, oophorectomy. "Ovariotomy" is

Digitized by Google

not a crime when there is an undoubted predisposition to degeneration, as well as lesions of the generative organs, especially in the suspected consumptive or the predisposed neurotic. We are not without authority for thus practicing on the male (see Matt. liber xix. verse 12): "There be eunuchs which have made themselves eunuchs for the kingdom of heaven's sake. He that is able to receive, let him receive it, therefore he is straightway preferred," at least he is rendered unable to transmit to posterity seeds of disease or a perverted progeny.

Sterility, to some patients, is productive of inharmonious relationship of husband and wife, and the obstetrician's investigation is an advance beyond the ramparts of the generative system of the would-be mother. It is unnecessary to go into detail of the gonococcus meanderings through the labyrinthian ways of tubal and lacteal domain to account for existing barrenness, as well as the various reasons recognized as classical causes. But an accomplice is oftttimes responsible. The obstetrical field is extended even beyond the gynecological specialist, to the male member, whose morbid anatomy reveals the victim, and innocence is justified, and happiness restored. This may not be one of the major problems of obstetric science and art, yet it is a condition which we find in this line of practice—only another reason for restricting the operations of the illy-prepared midwife.

Puerperal fever is a fact, notwithstanding aseptic and antiseptic rules of action. Then how shall we combat this deadly foe? And are there any new and improved methods of treatment in vogue? It is no longer a mooted question that surgical measures are resorted to with successful encouragement in the method of treatment of "puerperal fever." What was "Meigs" bloody record, with lancet in hand, instead of nail brush and alcohol? It may astonish you to know that some of his patients lived. He bled to syncope, and resuscitated with alcohol and ammonia, with muriated tincture of iron, and moderated and reduced the temperature and tenderness with ice, and pain with opium. Let us see wherein he is right. Let us accept the ice treatment, instead of the heat and moisture (poultices); it is a veritable antiphlogistic. Opium is always demanded in painful issues, but iron and alcohol fortify against sepsis.

A warning interposes in the too uncertain curette; accept the manipulations of the finger instead, and with continuous "antiseptic irrigations" into the uterine cavity, and be guarded against bichloride and carbolic acid poisoning. Do not slight the rectal domain; antiseptics here avoid and destroy auto-infection.

When uterine destruction has advanced beyond the limit, it is a final resort, and thoroughly practicable, to remove the uterus by abdominal section, and is advised even where there is already peritonitis.

Anesthesia for the parturient woman in normal labor, properly administered and intermittingly produced,—the anesthesia (chloroform) is free from any shadow of danger, and all alleged after evils do not exist, but inexpressible is the comfort and relief thus obtained.

'Tis always understood, abnormal conditions requiring instrumental assistance or operation of whatever nature, anesthesia is imperative. Chloroform should always be preferred to ether in the lying-in chamber.

The irregular and abnormal conditions of labor are where the obstetrician's art and skill may be demonstrated with a greater degree of success, though minus the glory of capital operations.

The first stage of labor may be protracted beyond endurance, and, paradoxical as it may seem, morphia will expedite the parturient process, quieting nervous excitability, and general relaxation follows, and an abnormal becomes a normal labor under its influence.

A tetanic contraction of the uterus sometimes exists, where, in addition to the above treatment, tincture of iodine is highly recommended and the following formula: Tincture of iodine, one part; alcohol, two parts." Five drops to be taken every half hour till relief.

In puerperal mastitis, a very annoying condition, sometimes present, will yield readily to the use of phytolacca decandra, twenty drops of the fluid extract every two hours, in addition to some of the preparations of iron, with carbolized dressings. The obstetrician ofttimes has to be the specialist, and treat new-born infants afflicted with gonorrheal ophthalmia. While it is admitted that nitrate of silver is effectual, it is very painful, and therefore we should welcome some other process. It is now proposed instead to use oxygenated water, from 1% to 2% per cent solution, to be instilled into the eyes. It is claimed that this solution does not cause any disagreeable sensation, and the pus is immediately coagulated, forming granular masses which are easily expelled by a weak solution of boric acid.

The Effects of Alcoholic Diathesis Upon the Procreative Results.—Probably it is presuming and trespassing upon the patience of this section too much to further elucidate this scope and field, wherein the obstetrician's observations at least should stimulate the humanitarian's aid with the doctors to a degree of interposing obstacles in the path of begetting offspring by inebriates. Shakespeare's theory of wine's results—that it is a great provocative—"giveth the desire, but taketh away action," would be literal if results were in evidence, but when history elucidates to the contrary, with victims, the inmates of asylums, penitentiaries, and alms-houses, with all the untold misery following, it is an object lesson of serious import. The child begotten at a period and under a condition of alcoholism is as certainly doomed as the extinction of life itself. "The dwarfing of childhood by spiritual and physical night has its origin in a sexual congress excited by alcoholic toxines, which artificially creates hells upon earth and complicates a destiny of human fatality, other than divine."

This is a subject for the doctors, lawyers, theologians, scientists, "political economists," to enter a combination to destroy the greatest enemies to modern civilization. Intoxication and pauperism, disease,

Digitized by Google

crime, and imbecility go hand in hand, and the obstetrician witnesses the advent of this pervert, and the latitude of the obstetrician is unlimited and the resulting effects are never-ceasing.

WHAT OF THE NORMAL SALT SOLUTION IN SURGERY AND ELSEWHERE?*

BY O. GROTHAN, M. D.,

ST. PAUL, NEB.

I am often at a loss to know why, for a brief period of time, new or perhaps formerly well-known methods and remedies do spring into all-absorbing topics in the medical press and society proceedings, and then, after a meteor-like career, they vanish as they came. Is it because their values have been overestimated on the spur of the moment, or is it that the methods advocated many times are cumbersome and mean the expenditure of too much time and trouble to the busy practitioner?

The subject I wish to bring before you to-day can scarcely be classed under either of these heads. Certainly not with the former. There is yet another class of remedies or procedures that sometimes vanishes from the armamentarium of the many and is retained only by a fortunate few, and this because the remedies are so simple or those using them have become so accustomed to their efficacy as to lose sight of the fact that many of their fellow-practitioners are almost wholly unacquainted with the benefits thus derived. This, I think, can be truly said of the normal salt solution.

From what I can gather in contact with more or less prominent physicians, I can but come to the conclusion that its uses and indication are but vaguely understood and appreciated by physicians in general practice. The other day, after an operation for a ruptured extrauterine pregnancy, I decided that it was necessary to employ hypodermoclysis. One of the assistants, an up-to-date young practitioner, remarked that we had better discontinue the procedure, as he "had fear of diluting the blood too much." At the time not more than half a pint had been injected.

About a year ago nearly every medical journal was filled by setting forth the advantages to be derived from the use of the saline solution, but now for months nothing has been said in this direction. When I chose this subject I did so with the knowledge that it is to many of you a hackneyed one, but even at the risk of being tedious, I deem it of sufficient importance to claim your attention for a few moments.

As we are treating of a subject that is following immediately in the footprints of blood transfusion, and that now has wholly displaced its precursor, it is but fair to say that Lower, of Oxford, who probably first performed the operation with success, in 1765, was destined to be the father of one of the most direct, if not the most direct, life-saving measure at our disposal.

The German surgeons, Kaufmann and Purmann, claim to have cured a leper in 1755 by the repeated injection of lamb's blood. About the same time, Schmidt, of Damrech, injected medicines, as well as blood, with a certain degree of success, in exhausting diseases. However, no particular advancement was made along this line until Professor Dastre, in 1889, desanguinated animals and replaced the blood by normal salt solution. This authority found that even when an animal is bled dry, and the blood replaced by this liquid, there is no respiratory embarrassment for the want of red blood corpuscles. Therefore, it looks as if the liquid part of the blood is the main stimulus to the live preserving centers—in other words, it is life itself. A short time after this, Professor Hayem, of the "Faculty of Medicine," and Sahli, of Berne, found that this injection was, in typhoid fever and uremia, highly satisfactory. A lull in the employment of this method then supervened, so that until about a year ago but little was heard of it. Then three important communications followed each other in succession. The first of these, by Dr. Duret, another by Dr. Lejars, and the third by Dr. Tuffier. This, together with recent clinical reports, have made the subject a most interesting one.

The more practical and lasting improvements in our treatment of disease usually consist in the perfection of older well recognized therapeutics, and a substitution of normal salt solution for that of blood transfusion is not an exception to this rule. The latter is of very ancient origin, and dates far back into the middle ages, while the former is very modern, considering its usefulness in its entirety. The different forms of blood transfusion—means that were well established a few years ago, and were quite popular, in theory at least—have to-day fallen into almost, if not entire, disuse. That this was a life-saving measure in its time there exists abundant evidence to prove, but since Little, Sands, Jennings, and others began the use of their complex saline solutions the employment of blood, immediate or defibrinated, has been viewed with more and more disfavor. Now Little's and Jennings' solutions have given way to the normal salt solution; that is, a teaspoonful, or a dram, of common salt to a pint of boiled distilled water, cooled in ordinary cases to 103° or 104° F. To-day the use of this apparently simple procedure, in the hands of both physicians and surgeons, should be ranked as the most important direct life-saving means at our command, and this not only in emergencies, but in applied therapeutics as well. Therefore, a glance at the usual methods of application, and the most ready and practical means to this end, cannot come amiss.

Operative Procedure.—There are four usual methods of employing the saline solution, viz.: (1) intracolonic, (2) intercellular, (3) intraperitoneal, and (4) intravenous. The first or intracolonic injection can scarcely be said to come under this head, but owing to its results, which in many instances have proven so eminently satisfactory, it must be accorded a fitting recognition. The mode of application, by the use of a long rectal or simple nasal tube, is too well known to need description.

As to the second or intercellular injection, it is the

*Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

simplest and best method in ordinary cases, and for inexperienced operators. As to the apparatus for this purpose, there are many complex and expensive ones. We have Aveling's transfusion apparatus, Dieulafoy's aspirator, and Colin's transfusion apparatus, and a number of others, all of which are objectionable for many reasons. When a small amount is required, it has been our custom to use an antitoxin syringe, by simply detaching the syringe from the needle, refilling, and attaching again. This is especially applicable in children approaching fatal collapse in cholera infantum. Where large amounts are required this process becomes tedious, and the use of a glass funnel with a rubber tube attached, five or six feet long, or a fountain syringe, is preferable. An Allen's pump or a Morton's transfusion apparatus may be used. The hydraulic pressure is, as a rule, sufficient for intercellular injection, when the container is elevated from three to five feet above the patient. Mr. Morse, of Norwich, to whom belongs the credit of this method, prefers the cellular tissue of the axilla as the best place for injection, though the abdomen or thigh may be used. A small or medium aspirating needle is attached to the tube of the apparatus and passed deep enough to be free in the cellular tissue. One or two pints, or more, can be used at one injection into the axilla, and two quarts into the abdominal wall, and complete absorption usually takes place within two hours. This method, in case of severe hemorrhage, should be associated with colonic injection.

The Lancet for June, 1896 (N. J. Med. Journal), contains a description of a case by Mr. Arthur Dodd, who was called to a patient, a multipara, and found she had lost an enormous amount of blood, was blanched, pulseless, and apparently moribund. Though Mr. Dodd considered the case hopeless, he injected a pint of normal salt solution in the cellular tissue of each axilla. This was accomplished by an Arbutnot Lane's apparatus, the needle being introduced deep enough to feel the point moving freely in the cellular tissue. After a very few minutes patient showed signs of rallying, and in two hours was apparently out of danger. The absorption was exceedingly rapid, so that after two hours there existed but very little swelling.

The third method, or intraperitoneal, has but few advantages in most cases over the one just described, except in cholera and allied diseases. The instruments required are both simple and easily obtained. A glass funnel, a six-foot rubber tube, and a small or medium aspirating needle are all that are required. Again, an Allen pump or a douche bag are equally efficacious. We may turn on the flow, insert needle in the region of the umbilicus in such a manner as to avoid puncturing the intestine; that is, slanting to the abdominal wall, and elevating the container to about two feet. I will say, for the benefit of the inexperienced, that the danger of puncturing the intestine is not so great as one might be led to suppose.

The fourth or intravenous injection—that is, transfusion proper—differs not at all from the ordinary blood transfusion of the past, and as the instruments are the same as used in the peritoneal injection, they scarcely merit further description. Usually one needs only to insert a large hypodermic or small aspirating needle into the lumen of the vein while the flow is running. The desired vein should first be made prominent, either by the parts being held dependent for a few moments or the application of moderately tight proximal compression, or both. There are cases, however, where it becomes necessary, from excessive hemorrhage or otherwise, to dissect out the vessel. This should be accomplished by cutting through the overlying skin with great care. When this has been done the vein will be seen as a blue line, which may, after a few scratches of the scalpel, be elevated and raised on its handle. The next thing will be the placing of a ligature under the vein in such a manner that when the canula is placed in its lumen, which should not extend over half an inch, it may be tied. As the wall of a vein is very easily lacerated, extreme care should be exercised, both in its opening and in the insertion of the canula.

According to Dr. Morton (Therapeutic Gazette, August, 1896), the temperature at which the artificial serum should be received into the circulation is about 100° F. Therefore the fluid in the reservoir should be about 104° or 105°. The same author also insists that in extremely bad cases of hemorrhage an insufficient amount is generally used, as well as the measure not being repeated as early as it should be. He says that many resort to the use of only a pint of the artificial serum, and observe only temporary benefit. A quart may be said to be the minimum quantity in an adult, while some use as high as three quarts. In extremely bad cases the canula may be left in the vein, and maintained in place by a bandage, for repeated injection.

Indications.—When we include here the most modern measure in all the range of therapeutics, that is, blood-washing, the usage of artificial serum is so extensive and varied that I must ask your pardon for the shortcomings of the following incomplete summary:

Hypodermoclysis, or the intercellular method, may be said in general to be efficacious in the milder forms of shock and hemorrhage, also in exhausting diseases and in less severe uremia and toxemia. It should always be combined with the other restorative measures as indicated, and in case of hemorrhage, with colonic injection. The absorption from the intestine after hemorrhage is surprisingly rapid.

Where we have had profuse bleeding, profound shock, or toxemia, from any cause whatever, intravenous injection should be resorted to. In toxemias or uremia approaching coma this method should be preceded by the extraction of from one to two pints of blood. In children, blood should seldom, if ever, be withdrawn prior to transfusion. Children bear the loss of blood badly, even in a very small quantity. In oft-repeated smaller hemorrhages, long continued, transfusion is of but little value.

The following special indications for the use of artificial serum may be enumerated: 1. Hemorrhage. 2. Uremia and uremic coma. 3. Operative shock. 4.

Digitized by Google

Septicemia, as septic peritonitis. 5. Sapremia, as, for instance, after absorption from the digestive tract of toxic ptomains and tox-albumins. 6. After ingestion of narcotic or other poisons. 7. In exhausting diseases, as cholera infantum, typhoid fever, diphtheria, pneumonia, syphilis, chronic pernicious anemia, prolonged suppuration, scurvy, purpura-hemorrhagica, tetanus, etc. 8. Its use after thoraco-centesis, according to the Lewaschew method; that is, the substitution by normal salt solution for the pleuritic effusion. The effusion is gradually aspirated and replaced by the physiological salt solution. Lewaschew, after its use in fifty-two cases, all followed by marked relief and prompt recovery, recommends it in the highest terms. It prevents the collapse of the organ into the empty pleura, and by gradual absorption exerts a general tonic and local antiseptic effect.

In conclusion, allow me a word with respect to personal observation of this method, as employed in an apparently moribund case of gangrenous appendicitis, with perforation, and in a case of extirpation of the scapula and surrounding parts for a large osteo-sarcoma.

Mrs. S., age about 38, was seen June 23. Temperature 102, pulse 130; moderate tympanitis; swelling about McBurney's point about the size of a man's fist; operation proposed and refused. June 24, found swelling almost gone; abdomen more tympanitic; temperature 100, pulse 145; extremities cold and patient bathed in a clammy perspiration. Operation performed. The appendix was found sloughed and a bowel perforation the size of a goose quill. Abdominal cavity contained an exceedingly foul mixture of liquid feces and pus. After rapid repair of the bowel, the abdomen was flushed with a large amount of sterilized water, and about a gallon of the physiological solution was left in the cavity, as warm as the operator judged it safe to employ. Condition an hour after rather better than before operation.

On June 27 the temperature rose to 104.5°; pulse too rapid to be counted. We found an old hernial sac, distended with pus, was the cause of this highly unfavorable phenomena. After the injection into each axilla of a pint and a half of sterilized water containing one and a half drams of salt the patient improved strikingly, so that in two hours the operation for the hernia was done without general anesthesia. Before the operation was performed free diuresis had taken place, the pulse rate improved, and temperature had fallen over one degree. It is our opinion that had the warm solution not been left in the abdominal cavity at time of first operation, the patient would then have succumbed to shock and septicemia. Likewise, had the intercellular injection been omitted on the fourth day, she would never have rallied from the septic hyperpyrexia and additional shock of the secondary operation.

Mr. C. was operated upon May 2 for an osteo-sarcoma of the scapula the size of a child's head. The tumor was of extreme rapid growth and very vascular, its history extending only over a period of three months. After the operation, and in spite of all precaution, the patient, being in a state of much-impaired health, showed unmistakable signs of approaching dissolution. The loss of blood did not seem to me to be very great, yet I verily believe that had not the artificial circulatory media been timely supplied, the operation would have been disastrous.

Now, whatever method is employed, or whatever instruments used, every aseptic precaution must be followed to the extreme. Field of operation, instruments, solution, and operator's hands must be above suspicion. The after-treatment is simply the sealing of the puncture with iodoform collodion.

While hemorrhage is as much to be avoided as ever, still, when it does occur, it carries not with it its former horror, and does not convey the feeling of helplessness which it did in the past.

RECURRING AMNESIC APHASIA FOLLOWING ATTACKS OF JACKSONIAN EPILEPSY.*

By P. H. SALTER, M. D.,
NORFOLK, NEB.

The case I have to report is, I think, of most rare occurrence. I have been unable to find mention of a similar condition in any of the literature at my command.

A. R., Lusk, Wyo., age 15 years.

Family History.—Father living at 54; always been healthy. Mother 52; also healthy. One brother and two sisters living; one brother dead; all healthy, and in no case has there been any history of epilepsy.

History.—His own health has been particularly good, never having had any disease of any kind, not even the ordinary troubles of childhood, up to the time of the beginning of the present complaint. He was struck on the head in 1893, while climbing to the top of a windmill, by one of the arms, which cut through the scalp. The blow was of sufficient force to render him unconscious, and he would have fallen to the ground had it not been for his shoulders catching in the hole on the platform. He has since had a fall from a horse and was stunned, but does not know the date. He was healthy and complained of no trouble until a year after the blow on the head. One day in 1894 (he was unable to give the exact date), as he was riding a horse "rounding up" cattle, he became suddenly partially blind. Everything became hazy before his eyes. He said he may have lost consciousness for a minute or two. There was no pain or dizziness. The attack lasted about ten minutes. Afterwards there was soreness in the head on quick movements. This passed off in two or three hours and the next day he felt as well as ever. About one month later he had another similar attack, only both the first and second periods were longer. Since that time the attacks became more frequent and of longer duration. After he had had quite a number of attacks he began to notice a numbness in his hands and arms. Sometimes it would only affect one hand or arm, and again both. The numbness would only last ten or fifteen minutes after the primary attack.

* Read before the Elkhorn Valley Medical Society, July 6, 1897.

Digitized by Google

About eighteen months from the beginning of the attacks, in March, 1896, he had one that was quite severe. While riding his horse he was taken with blindness, as he described it, which lasted about twenty minutes. He had been cutting out some cattle of his father's from a herd, but when the "blindness" came on he could not see well enough to distinguish theirs from the others, so drove them all to a corral. After this "blindness" passed off he had considerable numbness of both hands, but none in feet; could walk all right. His father asked him where he was taken with the trouble and he said, "Down by—" and could not speak the name of their next neighbor. After he went into the house they tried to find out what caused the attack. He said, "I drank too much," and then could not remember the word "coffee," and could only explain what he meant by putting his hand on the coffee pot. Since then he has had about one attack a month until the beginning of August, 1896, he had three attacks in one week. Each time he forgets words, and it seems to be words of more than one syllable, and in nearly all cases nouns. Those with the single syllable he can speak. He says he remembers perfectly all that passes during the attack, but the father thinks he is somewhat out of his mind. He complains that during the last attack his throat and tongue felt swollen and stiff. In August, 1896, he had an attack that was the most severe that he had had. He had had an attack the night before about like the others, but on this day it lasted two hours. He was partially blind and the forearm numb. Throat and tongue felt stiff and swollen. He says he remembers all he said and did, but his sister says he seemed to be somewhat out of his head, and his eyes looked wild. He got up and placed the chairs in a row in the room, but he claims he knew what he was doing and only did this to pass away the time. He had a small mirror and looked at himself and said, "How —— I look." Then tried to make them understand he looked pretty, but could not remember the word. After recovery he said his head was very sore on movement. In all the attacks, and following them, his being unable to speak the names of things, although he knew what he wanted and could point to them. This aphasic condition would pass off in the course of an hour or two after the attack and leave him as well as usual. The father told me that he had grown rather dull in his intellect. Previous to these attacks he was a particularly bright boy, but at this time he was quite dull, and seemed almost stupid.

Physical Examination.—Complexion, dark; expression, stolid; temperature, normal; tongue, red on edges and coated; teeth, good; gums, normal; throat, appears normal, but after an attack he says it feels sore and he has difficulty in swallowing; appetite, good; bowels, constipated; hernia, none; piles, none; respiratory system, normal; circulatory system, pulse, 76, normal; area of dullness, normal; sounds, normal. Urinary System—Reaction of urine, acid; sp. gr. 1.022; color, light yellow; quantity, normal; deposits, some mucus and earthy phosphates; albumin, none; sugar, none. Microscope—Some crystals of the triple phosphates and oxalate of lime. Nervous System—Sensation, normal; reflexes, normal; pain, in head only after attack and then on movement; sleep, good. Abdomen, distended with flatus, but no points of tenderness or anything abnormal to be found. Head, well formed; scar over occipital bone near the superior angle, extending over the lambdoidal suture on the left side; marked depression in the bone.

Now, with these facts before us, I have diagnosed this a case of Jacksonian epilepsy, with amnesic aphasia following the attacks, and the cause a depressed fracture over the occipital convolutions of the brain, with adhesion of the membranes. Now, we have two forms of this disease, motor or ataxic aphasia, and sensory or amnesic aphasia. The latter may be subdivided into apraxia, word-blindness, and word-deafness.

The above case comes, I think, under the head of word-blindness. It is not necessary for me to go into the anatomy of the brain in the present instance, but I will briefly point out the probable center in this case.

The studies of Beevor and Horsley on the brain and its motor areas, and of Lichtheim on the sensory, have shown us that speech is a highly complicated process. There are five centers directly connected with speech. These are the intellectual center, the center for the hand, that for the mouth, the ear, and the center for the eye. The visual center is situated in the occipital lobe. The center for motor speech in middle frontal convolution. Now, in this case we have a depressed fracture over the occipital lobe, which evidently causes irritation to the visual center, and thus through the higher speech centers.

I advised operation last August, but the father refused and wished me to give the boy medicine. This I did, putting him on iodide of potassium, beginning with five-grain doses three times a day, after meals, and increasing gradually until we reached a dose of twenty-five grains three times a day. I also gave him strict instructions as to diet, and gave him medicine to regulate his digestion and bowels. I did not hear from him for some three months after he left my care, some time in November or December, 1896. His father called on me at that time and said the boy had had only two attacks since leaving Norfolk. I heard again in April last and he had not had an attack so far this year.

INFECTION IN WHOOPING-COUGH.—Weil, after much experimenting as to when whooping-cough is most infectious, concludes that infection ceases very soon after the characteristic whoops commence, and that, therefore, in a family it is not the patient who is already whooping, but his brothers and sisters who have not previously had whooping-cough, who ought to be isolated.

IF you are not a subscriber to the WESTERN MEDICAL REVIEW, why not? Is it too expensive? See first item on editorial page.

Digitized by Google

ECZEMA AND ITS TREATMENT.*

By WILBUR N. HUNT, M. D.,
CENTRAL CITY, NEB.

On the part of the general practitioner the subject of dermatology has in the past been much neglected, and has failed to receive the attention it deserves, either from the medical student or from the physician in active practice.

For this condition I am of the opinion that our colleges are largely to blame. The applicant for a diploma must be tolerably familiar with the diagnosis, symptoms, and treatment of many diseases of which he may never see a case, but he may know little or nothing of the most common skin diseases, and yet be allowed to go out among his fellow-men as a fully equipped Esculapius. He must be ready to give the anatomical characteristics of Addison's disease, of which he may see a case or two in a lifetime, and about which he would have abundant time to read up, but is not required to know the symptoms of eczema, which will come to him for immediate treatment almost every week of his professional life. Surely there ought to be a basis of instruction in these practical subjects on which the physician could build after receiving his diploma.

The statement is made that of three thousand physicians in attendance at the Now York Polyclinic, not one per cent. could correctly diagnose eczema. "Brethren, these things ought not so to be."

When we consider that a much greater portion of the physician's effort is expended in relieving pain and distress than in the actual saving of life, and then recall the vast amount of suffering to which eczema gives rise, we realize how important it is that we should be able to handle this disease with a reasonable amount of skill. From my own observation, I am satisfied that a great deal of foolish work is done by the general practitioner in the management of this most common of the skin diseases, and it is for this reason that I bring the subject before you for discussion at this time. A short time ago a young lady came to me with a mild case of eczema, and told me she had already consulted one doctor, who informed her that she had a "skin disease," and that it was useless for her to take treatment, as she could not be cured. Suffice it to say she now has a clear, healthy skin, in spite of his unfavorable prognosis.

It is said that Hunter divided skin diseases into three classes, "those that sulphur would cure, those that mercury would cure, and those that the devil couldn't cure." Substituting arsenic in place of mercury, it would seem that a great many physicians of the present day adopt the same classification for eczema. While this may be a very simple and easily remembered division, it does not conform to the facts, and gives the devil more than his due.

Eczema is an inflammation of the skin, of which the common symptoms are redness, thickening, moisture, crusting and itching. Unfortunately, it has no characteristic lesion, but may bear some resemblance to almost every other disease of the skin.

For the purpose of diagnosis, the classification which has been most satisfactory to me is that of Fox, viz., erythematous, papular, vesicular, and pustular at the beginning, any one of which may later become crusted, scaly, fissured, or ulcerated.

As regards treatment, the division which is most useful is that based upon the grade of inflammation, viz., acute, subacute, and chronic. It should be remembered that this division is dependent on the pathological conditions rather than on the length of time of the existence of the disease, as it may continue acute through a long period of time, or may become chronic very early in its history. Two or more of these forms may co-exist in the same subject, and one form is very likely to pass into another as the disease progresses.

As to the cause of eczema there has been much discussion, some maintaining that it is toxic in origin, and others that it is of parasitic origin. Up to the present time the question is still undecided, the micro-organism, if there be one, not having yet been discovered. In infancy the cause seems to lie very largely in improper food and imperfect digestion, and these also have considerable influence on the causation of the disease in the adult. But here other factors enter in, and it is extremely difficult, and often impossible, to decide with any degree of certainty as to the cause other than the simple fact that the patient has a peculiar diathesis toward eczema. It is quite certain that a debilitated condition of the system, from whatever cause, is a predisposing factor of no small importance. As with other inflammations of the skin, there is a popular notion with the laity, and with some physicians, that the coming out of an eczema is somehow of great benefit to the patient, and that its sudden disappearance is a sure sign of disaster. As a matter of fact, an inflammation of some internal organ may cause a skin eruption to recede, but it is always a result, and never a cause, of such inflammation. As has been well said: "The coming out of an eczema is never a fortunate thing, unless it comes out on some one's baby other than our own." It may be safely said that the quicker an eczema is cured, the better it will be for the patient, if not better for the reputation of the physician in charge of the case.

In the treatment of eczema it is evident there is no specific, as the numerous remedies advertised as sure cures would clearly prove. Perhaps in no disease, local in character, is it more essential that the physician have a thorough knowledge of general medicine than in this one, but in my judgment eczema should always be looked upon as a curable disease, and when failure results from treatment the doctor is at fault, rather than the disease. Some authors maintain that in many cases local treatment only is needed, while others take the same view regarding internal treatment. It may be stated, however, that the prevailing opinion at the present time is largely in favor of both local and systemic treatment in every case of eczema, and with this opinion I fully concur.

Most of the cases that come into our hands are either acute or subacute in character, and the local

*Read before the Nebraska State Medical Society, Lincoln, May 20, 1897.

Digitized by Google

treatment in these cases should be of a mild and soothing nature. In the chronic forms, stimulating applications should be used, such as the ointments of mercury, salicylic acid, sulphur, or oil of cade. In eczema intertrigo or eczema of chafing, a solution of nitrate of silver, 3 to 40 grains to the ounce, is almost a specific. In moist eczema, soap and water should be avoided; but in the dry, crusted, or scaly cases the daily cleansing with soap and water will be of benefit. As to the internal treatment, I have usually first sought to correct any errors of digestion, after which, in acute and subacute cases, an alkaline treatment will often result in a speedy recovery. In these forms I am decidedly of the opinion that arsenic and antimony should never be used. In chronic cases these remedies are often useful, although some authorities say we should discard them altogether. In debilitated subjects the alkaline treatment would be inappropriate, and here a distinctively tonic course will usually be found beneficial. Before giving up a case as hopeless or turning it over to a specialist, be sure to keep the patient for at least two months on small doses of sulphur.

While these are but mere hints as to treatment, I believe that by following out the plans here suggested we shall be able to cure a large portion of our eczematous patients.

AMYTROPHIC LATERAL SCLEROSIS.*

BY J. M. AIKIN, M. D.,
OMAHA, NEB.,
CLINICAL LECTURER ON DISEASES OF THE BRAIN AND NERVOUS SYSTEM, CREIGHTON MEDICAL COLLEGE.

Whether this disease is actually as uncommon as reports seem to indicate, or, if it has been unobserved and classed with those affections which it so closely simulates, is a question not yet fully solved by the medical profession.

Its symptomatology is so closely allied with progressive muscular atrophy, chronic myelitis, syringomyelia, and multiple neuritis that a most thorough history and careful examination of the case in all its phases is necessary; also that a sufficient period of time transpire to fully establish a degenerative, rather than functional disorder.

It is not my purpose to enter into a defailed review of the symptomatology and pathology of amytrophic lateral sclerosis; for I doubt not you are all acquainted with these, or have ready access to them in your libraries, and the current medical literature by students of neurological medicine. I only wish to report a case, and from it deduce the cardinal symptoms by which I arrived at my diagnosis.

Mr. A. Blank, an American, æt. 56 years, married; medium height, dark complexion, habits temperate, as relates to excesses in foods, drink, or venery, but intemperate as regards regularity and time for eating and sleeping. History of his grandparents is negative. His father died at 62 of an alleged typhoid fever; while his mother lived to 84 and died of some stomach disorder. He has four brothers and three sisters living, and all well except one sister, who is very nervous. He passed through childhood and youth without any serious illness, and when about 25 years old entered the employ of a railroad company and was soon advanced to a position as conductor.

After five years' service in this capacity, he alleges, he became very nervous, and was compelled to cease work for six or eight months, spending much of this period in bed or his room; then resuming the same work, he was on and off duty for two years, when he quit the railroad service and for the next three years engaged in mercantile pursuits, during which time he so far regained his health as to permit him to again enter the railroad service as a condcutor, and by taking frequent vacations to repair his "nervous dyspepsia" and periodic attacks of hay fever, he continued this employment for six or seven years, when he had a second attack of "nervous prostration," not so protracted, but more severe than the former. Following this attack he continued his duties as conductor, and for a period of about five years enjoyed better health than for any corresponding period in twenty years. Then followed a varying career of vacations and work, the former dominating, until early in 1896 he resigned all work and committed himself to his life-long advisors—the high potency disciples of Hahnemann—until February, 1897, when I first saw the patient. On first observation I noticed the anxious expression of his face, a restlessness in whatever position he assumed, and a decided emaciation of his muscles. The skin was deficient in moisture and presented a dry and anemic appearance. Respirations 28, and heart action 100 per minute; temperature normal.

On stripping him and comparing the limbs, there was no marked difference in the degree of wasting in corresponding parts on either extremity, while the deltoids, pectoral, intercostal, abdominal, and posterior thoracic muscles were likewise greatly atrophied.

The muscles of the face, and the platysma myoides, were relatively better nourished than any, but a comparison of his features with a photograph made several years since reveals wasting there. Tactile sensibility and sensation to pain not much changed, but impressions from heat or cold slightly increased. The reflexes exaggerated, but diminished in power. Palpation failed to reveal tenderness along spine or elsewhere, but did cause fibrillary twitchings. He walked with an uncertain movement, but no pronounced ataxy, nor does he drag either extremity of the foot. He describes a well-marked girdle feeling as encircling the body just above the umbilicus, and alleges its existence for years. He has never observed any loss of power in the rectum or bladder muscles. The sexual power has been totally lost for several months, but a diminished desire remains.

There is a decided diminution in faradic irritability of the muscles. He complains of great weakness of the legs, and is positive and persistent in alleging the occasional existence, for many months, of neuralgic pains in both extremities and also in the trunk muscles, but did not notice the wasting till December, 1896. He complains of inability to inspire a sufficient volume of air to dilate the lungs below a line on about

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

a level with the third costal cartilage. Repeated chemical and microscopic examinations of his urine revealed slight, but no constant, changes from the normal. He has complained, after considerable walking, of a dull pain on each side of the spine in the lumbar region; but this, with his alleged neuralgic pains, is all the sensory symptoms alleged. His appetite is not good, and the bowels are constipated. Mentally he is clear, but ever apprehensive lest some article of food will be too strong for his digestive powers, and the same psychological ideas obtain about any medicine, fearing it will be too strong for his stomach.

These are some of the principal objective and subjective symptoms as I have seen them in this case, and if a disease is known by physical and mental manifestations that are a departure from the physiological operations of the individual, then a particular disease must be diagnosed by certain characteristic signs and symptoms.

The fact has long been established, by internal medicine, that many diseases, especially in their early history, present analogous symptoms, and the differential diagnosis is established by offering the special indications of divergence. We of this generation would belittle our intelligence if we fail to profit by the accumulated results from scientific medical research by our predecessors.

The advance in general medicine has made possible special investigation in the various departments of human physiology and pathology; moreover, in none has the advance in the past few years exceeded the truths brought above the horizon of medical thought, and pathological importance, than that given to the profession by students of mental and nervous affections.

Comparing the symptoms of my patient with those mapped out by authors and investigators along these lines, I have diagnosed amytrophic lateral sclerosis, scarcely believing it can be denied admission to this select circle, when the cardinal, and many secondary, symptoms are present, and, with this diagnosis, an unfavorable prognosis was given.

The diagnosis of amytrophic lateral sclerosis may be made ante-mortem, with a fair degree of certainty if the patient be thoroughly examined, and the differential points between it and analogous clinical pictures constantly borne in mind. The diseases which present the greatest aggregation of points in common with it are progressive muscular atrophy, chronic myelitis, multiple neuritis, and syringomyelia, but by close observation, with repeated examinations, the counterfeit will be detected. The girdle sensation, so constant and prolonged in this—as in all cases—is a symptom of inflammatory and degenerative process within the cord, and it is important to remember that nerve root degenerations of the cord are expressed by this sense of constriction or tightness, as if a band were tied tightly about the part; and the muscular wasting is a sequence of interference with the anterior motor nerve roots, which, with the addition of the excessive reflex and fibrillary spasm, indicate pyramidal tract degeneration.

The absence of sensory disorder, ataxy, trophic disturbance, or visceral interference augurs integrity of the posterior columns. This observation is further strengthened, too, by the fact that when the cord or nerve roots are the seat of an irritative inflammation, acute trophic changes occur, while nerve degeneration of these parts induces slower and less pronounced changes. Moreover, the absence of muscular contractions of the "muscular dystrophy," so precisely described by Erb in his recent treatise on Myopathic Atrophy, takes this case from the group classified as primary myopathies. Again, the loss of power in the intercostal muscles, which here is gradual and increasing, must be a sequence of motor nerve root degeneration in the anterior spinal nerves of the dorsal division.

A CASE OF CRANIOTOMY.*

By J. M. HARDY, M. D.,
CAIRO, NEB.

At 11 o'clock on the night of January 21, 1897, I was called to attend a case of obstetrics, and on arriving at the home of the patient I learned that my patient had been in labor pains for some eight hours, and that they were trying to get along without the aid of a physician, as so many of my German people commonly do.

On my first casual examination I found that the head rested in and upon the brim of the pelvis, and concluded, as the woman was somewhat exhausted, to administer a small amount of chloroform, apply the forceps, and deliver at once. I began these manipulations, could not move the head of the child in the least iota, and after about twenty minutes of hard work removed my instruments and made a better and more extensive investigation. I pushed the head up and back a trifle, and found to my disgust and surprise that there was a small and very hard nodule, undoubtedly of bony substance, projecting from one of the inner sides of the pelvic bones, and that the head had come down upon this projection, and, resting upon it, could go no farther. The nodule was about the size of a walnut with the hull off, i. e., about an inch in diameter.

Here was a very bad condition of affairs, for it was over fourteen miles to another physician, and by this time, 1 o'clock at night, a heavy, drifting, and blinding snow-storm had set in, and it would be impossible to get another physician to the place before 8 or 9 o'clock in the morning, and I was reasonably certain that my patient's failing strength would not last until that time.

I therefore concluded to do desperate work, and decided to destroy the child and be sure and save the woman. I did not have any of the instruments at all suitable for going in by way of the abdomen, and I had never seen such an operation performed; and as I had instruments suitable for doing a craniotomy, I began operations in that direction.

I placed the handkerchief with the bottle of chloroform in the hands of a woman, and bored down through the top of the head of the child, crushed head

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

together with common obstetrical forceps, and after about twenty minutes I was gladdened to have the head come down, and immediately delivered a large male child. The secundines came along very quickly, and so far everything was all right. But I stayed with the patient until daylight, thinking that every moment would be her last. She rallied early in the morning and made as rapid and complete a recovery as any ordinary case of obstetrics.

Some of my brethren may think that it would have been preferable to have performed the Cæsarian section or Porro's operation, but, after these months, I think that under like circumstances I should do the same thing again.

COMPLICATED CASES OF LARYNGISMUS AND TETANY.*

BY CHARLES C. CRAWL, M.D.,
RANDOLPH, NEB.

When I stated the subject of this paper to our honorable recording secretary, I had in mind the discussion of one case only, but found it necessary to incorporate three others in order to bring before you all the salient points, the ultimate object being to provoke discussion with a view to a clearer understanding of a few complications which I believe to be seldom met with in ordinary practice. All these cases were among the farming community, the patients being healthy and vigorous, accustomed to the fresh air and sunshine, possessing healthy minds in healthy bodies.

CASE I.—Mrs. H., æt. 17, married. First attack occurred July 14, 1896, while fanning a patient upon whom a laparotomy had been performed, during the dressing of the wound. It appeared to be syncope, and I directed her removal from the room, placed in the horizontal position, and cold water applied to the face and head, with inhalations of camphor. Recovery not being prompt, my attention was called to her. Found her badly cyanosed, respiration suspended, muscles relaxed, still unconscious, heart's action arrested. Introduced the finger far back into the throat and relieved the spasm, securing one labored inspiration, with an immediate return of the spasm. Chloroform, am. valerianate, and amyl nitrite were found useless. An attempt to swallow brought on an immediate attack, and resort was had to hypodermic injection of apomorphine. Emesis brought relief in intervals of one to two hours. Patient was removed to her home, one mile distant, the 15th, at 2 P. M. Soon after she was seized with an attack of tetany, which was preceded by violent hiccough. Chloroform and morphia sulph. failed to bring relief, and mechanical means were used to relax the muscles. A ℞ of kali brom. ʒ ii., chlor. hyd. gr. xxxii., fl. ext. yerb. sant., syr. simp. āā ʒ i., sig. ʒ i. every half hour, with hot and cold pack alternately. Relief after six hours and recurrence in twenty-four hours. Medication was withdrawn, mechanical assistance delayed for thirty minutes, resulting first in rigidity of the muscles, followed by relaxation, and then catalepsy, with unconsciousness and loss of sensation. Spts. ammoniæ aromaticus brought very tardy relief. Treatment was continued with varying success for two weeks and patient dismissed from immedate attention in a weakened condition, unsteady gait, with a strong tendency to tip backward.

CASE II.—Miss W., æt. 19, sister to Case I, single. Bilious and nervous temperament. First attack August 8. Laryngismus with intermittent severe hiccough, complicated in ten hours with tetany and rigidity of the muscles of the extremities and severe pain. Some hysteria, phantom tumor lying in left inguinal region, and state of ecstacy following relaxation.

This case could not tolerate chloroform, and previous remedies all failed. Hoffman's anodyne with faradization and massage stayed the progress of the disease five days, when a sudden and unexpected collapse occurred. Patient became cyanosed, respiration 8 and labored, pulse 42, rapidly fading till imperceptible. Tardy reaction from liberal doses strychnia sulph. and liberal administration of brandy.

CASE III.—Miss W., æt. 15, sister to Case I and Case II. Phlegmatic temperament. A picture of perfect health and fully developed young womanhood. First attack August 11. Laryngismus, tetany, and tonic spasm of all the voluntary muscles, resulting in extreme opisthotonous. Paroxysms lasting from twenty minutes to two hours. Massage and cold packs applied to the spine the only relief. Relaxation scarcely complete at any time. Perspiration copious. Pain agonizing. Consciousness not impaired. Temperature normal. Slight pyrexia about every tenth day. Patient was isolated in a darkened room and all source of irritation removed. Treatment, chloral hyd., kali brom., Indian hemp, and belladonna. Morphia sulph., administered hypodermically up to the limit, failed to give its physiological effect. Chloroform—internal administration—brought temporary relief. Retention of urine, with general anasarca, July 5; catheterization necessary every twelve hours. Anasarca yielded to ordinary treatment by July 20. Tonic spasms ceased soon after. An attack of renal colic followed as a further complication, more than 100 calculi, ranging from the size of a millet seed to that of a grain of wheat. When dropsy disappeared, two boggy enlargements remained, rising at the spinal column in the lumbar region and extending around the left side to the median line, a space of two inches intervening; extremely sensitive and hyperesthetic. At times the tonic spasms with opisthotonus occurred uncomplicated, the patient being able to converse freely. Relaxation produced prostration, from which the patient rapidly recovered under proper stimulation. Inco-ordination made locomotion impossible for several hours. Recovery after prolonged suffering. Somebody tell me how to cure such a case in a reasonable time.

CASE IV.—Mrs. W., æt. 24, mother of two children. Symptoms very similar to Case II. Attacks began with short spasmodic breathing, increasing in rapidity till the spasm of the glottis arrested it. Followed in a half to one minute with an explosion and a sound

*Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

exactly resembling the braying of a mule, though much less vociferous. This patient was naturally nervous and somewhat irritable.

What I wish to call your attention to is the apparent uselessness of all standard remedies during these complicated attacks.

Conditions common to all were nystagmus, good appetites, and hearty ingestion of food whenever permitted. Constipation, with flatulence. Insomnia, little or no pyrexia, and very little anemia.

REFLEX NERVOUS COUGH.

Notes taken from a lecture by Prof. Dr. Schech, Munich University, for the WESTERN MEDICAL REVIEW, by Paul Ernest Koerber, M. D., Omaha Medical College, 1896.

Formerly we looked at a cough as being a sure sign of a diseased respiratory tract, while now we know that a cough may be absent in spite of the most severe lesion of the respiratory organs; and again, that we may have a cough of the most severe kind without any such a lesion.

Clinical search has shown that the etiology of cough may be sought for in other organs, as can be proved by physiological experimentation. Hereto, of course, belong either the general nervous system, a neurasthenic or hysterical point, or just a localized neurasthenia and hyperesthesia of certain mucous membranes or organs. We therefore call this kind of cough a reflex nervous cough. Its manifestations differ very much, not only as to the frequency and sounds, but also as to the duration. Very frequently we find it accompanied by other nervous symptoms, as spasm of the vocal cords, pharynx, and esophagus, clonic and tonic contraction of the muscles of the face and those of respiration, resulting in vertigo, or ictus laryngis; while Schrotter gives to the contractions of the muscles of the face in connection with the reflex cough the name of "chorea laryngis." A characteristic property of this nervous cough is the constant cessation during sleep and its beginning on awakening, and another is that most of the patients feel well and have a good appetite, and still another is the absence of secretion and the expectoration consisting simply of saliva. Very often we find redness and loosening of the posterior wall of the larynx, which is the result of the cough, but not the reverse. It is evident that such patients are a burden to the surroundings; children, therefore, must stay away from school, etc.

Speaking of remote organs as etiological factors of reflex cough, we must, first of all, consider the general nervous system, brain, and spinal cord. Not only Kohl's physiological experiments, but also clinical facts, speak for the occurrence of a central cough. Of a central nature is unquestionably the cough of tabes, which so often presents the laryngeal crisis of tabes, and of the same central nature is the cough accompanying chorea, epilepsy, and injuries to the cervical vertebræ, as well as the cervical portion of the spinal cord.

We find the reflex nervous cough to be exceedingly frequent at the period of puberty of both sexes, the most frequent from the twelfth to the seventeenth year, and hence the name of "cynobex hebetis" (cough of puberty). Clarke, an English physician, tries to find the cause in the changes of the nervous system and larynx which occur at this age, and also in too rich food and alcohol. Schech, on the other hand, fails to prove the latter, as the youth of Munich does not show it. Schech brings up another point, which he thinks is of greater importance as an etiological factor, and that is the excitement of the genital organs and masturbation. Still another factor is the imitation, or rather simulation, and he mentions a case of a servant, who began to cough and after a short time the whole family was afflicted, showing plainly neuropathic elements as the cause.

Turning from the centrum to the periphery, we first have to consider the ear. Hadden has seen paroxysmal coughs in 21% of all cases, by passing the ear speculum, by cleansing the ear, by the presence of ear wax and foreign bodies. This ear cough is more frequent in men than in women, and is caused by irritation of the ramus auricularis vagi, which transfers it to the laryngeus superior and from there to the centrum.

A second organ which under pathological conditions is the seat of the cause is the nose. We find the reflex cough by hyperesthesia of the mucous membrane—hypertrophic rhinitis, polyps, foreign bodies, rhinoliths; the same is true of the naso-pharyngeal space, by hypertrophy of the pharyngeal glands, granulations. I would like to add here the uvula, which we frequently find hypertrophic and elongated, causing irritation at the base of the tongue and giving rise to a continuous cough. By women, a relatively frequent cause of this reflex nervous cough is the hyperplasia of the tonsils and follicles at the base of the tongue, which rub against the epiglottis and give the feeling of a foreign body, or globus hystericus.

Irritation of the nervus laryngeus superior, or the vagus or its cut central end, will bring on a cough; irritation or compression of the nervus recurrens does not, showing it to be a true motor nerve, which has no centripedal fibres.

Pressure of tumors upon the vagus, swelling of the lymphatics, struma, neuritis, deep cervical abscesses, pressure from aneurism of the aorta, will also cause violent cough. The existence of a reflex cough from the gastro-intestinal tract is doubtful. The vomiting following a paroxysm may be caused by secretions coming from the larynx and tickling the pharyngeal wall, or root of the tongue, or it may be that by the act of vomiting secretions coming from the respiratory tract are expectorated, and by passing the trachea and larynx bring on a paroxysm. The cough in connection with hyperacidity of the stomach is a laryngeal cough, and is caused by the eructation of gases from the stomach, which irritate the larynx while passing.

The existence of a liver and spleen cough has been observed by Naunyn, by palpating the organs in a normal or pathological state. Schmidt has seen the paroxysm leave after the passing of gall stones.

More interesting is the uterine cough. Profanter has observed it during menstruation, more frequently

Digitized by Google

during pregnancy, and most frequently by inflammatory affections of the pharyngeal organs in connection with chronic metritis, oophoritis, adhesions, and also by abnormal locations of the uterus and new formations, and during the climacterium, but very seldom after it. Exciting causes are full bladder and rectum, coitus, examination, fall, trauma, dancing, etc. The uterine cough weakens the patient, causes pain at the insertion of the muscles of the chest and abdomen, increases the abdominal maladies, and may cause abortion. We further find the reflex cough, by man, by inflammations and tumors of the testes, urethra, and bladder. Langhorne mentions a cure after operation for adhesions of the prepuce.

The last organ which must be mentioned as a causal factor is the skin. Many people cough as soon as cool air strikes the perspiring skin. Leyden has seen it during percussion, by touching the skin, etc.

The diagnosis of this nervous cough, which in my estimation is more frequent in the female sex, is very difficult if the acoustic symptoms are absent. The first aid in diagnosis is certainly the exclusion of any disease of the respiratory apparatus, by the most diligent and repeated examination. This is by no means easy, as we may easily overlook a small circumscribed spot in the lung, a beginning phthisis, a bronchitis, whooping-cough, not speaking of the possibility of the presence of small foreign bodies which may have been aspirated during sleep. Schech quotes the relative frequency to acute and chronic inflammations or small fissures in the mucous membrane of the arytmoid cartilage, which may be so small and therefore not noticed. He traces the violency of the cough to the unusual sensibility of the mucous membrane at that place, of which he speaks as the "cough centrum" of the larynx. Repeated examinations and observations may guard us against such eventualities, as well as the cessation of the nervous cough during sleep. By uterine cough the patient is generally anemic and weak, and therefore the danger of diagnosing some lung disease is great. Old people who begin to cough as soon as they get into a horizontal position, especially when going to bed, is a rule due to a diverticulum of the esophagus, whose contents come in contact with the larynx by the change of location. But still more difficult is the detection of the cause, or better, the places, to which the cough can be traced. I can only say to give your full attention to the least changes in the ear, nose, throat, and larynx, and to sound the hyperesthetic spots and try to bring on a cough by experimentation, and right here we find the application of cocain of diagnostic value, the cough ceases, to return again after its local action has subsided. We also palpate the skin and the internal organs, examine the tendon reflexes and the sensibility, and look for neurasthenia, tabes, or any other disease of the general nervous system. But still there are certain cases by which we are not able to determine the cough-exciting zone, as is often enough found by paresthesia of the organs of the neck. The prognosis is, speaking generally, a good one, though in some special cases an unfavorable one, on account of its long duration, and especially chronic nature. The therapy must naturally be directed to the cause, and the "cessante causa, cessat effectus" can be observed most splendidly by this kind of cough. Local treatment, therefore, is indicated very often; for instance, the removal of cerumen, foreign bodies, nasal polyps, hypertrophic tonsils, chronic pharyngitis, etc. For the uterine cough, often a pessary will be sufficient. The same is true of an operation for uterine polyps, treatment of endometritis, and other affections. But in most cases a general treatment is indicated, consisting of a change in location, diet, removal of all alcoholic stimulants, hydrotherapy, combined with gymnastics and outdoor exercises, and internal remedies, as preparations of bromide, iron, arsenic, valerian, quininæ, valerianat, phenacetin, strychnine, etc., are necessities. Cocainization of the larynx, galvanization of the spinal cord, or nervus laryngeus superior or vagus, have only a transient effect. The use of narcotics is dangerous, especially morphine and all the derivatives of opium, on account of the formation of a habit.

Munich, July, 1897.

The Calot Method of Reducing Curvature of the Spine by Forcible Pressure.—M. Brun reports the death of a child of four during this operation, but states that the fatality was due to the chloroform narcosis, which is extremely difficult to carry out in this operation, as the little patient lies on his face and respiration is more or less seriously affected. Prof. C. Willems, of Ghent, contributes an article to the Semaine Med. of July 28 on this subject, in which he states that the narcosis is unnecessary and dangerous, and that the operation is equally if not more effective without it, while the pain is not excessive. The operation itself has upset all our preconceived notions of handling Pott's disease, and the fact that the forcible reduction of the curvature is not particularly painful is only one more astonishing feature. The child seems to object more to the forcible traction of the assistants than to the pressure on his back, crying, "Don't pull so!" rather than the scream of pain that might be expected. Willems reports eighteen cases thus treated without an anesthetic; the results were more than satisfactory in each case (ages two to four; oldest curvature five years). He recommends the operation to all, and adds that relaxation of the muscles is secured much more effectively by the fatigue of the traction than with a narcotic, as the effects of the latter are just passing away when the plaster corset is being applied, when the relaxation is most important; while without a narcotic the muscles are at that time in the most relaxed condition from fatigue. He has seen more than one child fall asleep from fatigue the moment the tractions ceased. He concludes by observing that more assistants are required (six to eight), but that this is all, and any physician can now undertake this simple reduction of the gibbosites pottiques alone, without other assistance than he finds in the patient's family, or any special apparatus except the Calot plaster corset, to immobilize the straightened spine.

Digitized by Google

Selected Articles.

SUBMAMMARY INFUSIONS OF SALT SOLUTION IN PRIMARY ANEMIA FROM HEMORRHAGE IN SHOCK AND IN SEPTIC INFECTION.*

BY J. G. CLARK, M. D.,

RESIDENT GYNECOLOGIST IN THE JOHNS HOPKINS HOSPITAL, BALTIMORE.

Hemorrhage and Shock.—For the last two years we have employed in the gynecological department of the Johns Hopkins Hospital submammary saline infusions in every case where there has been the slightest symptom of depression after operation, or of shock from the loss of blood in surgical or puerperal cases. The first case in which we had occasion to use this means of reviving a patient from the effects of a profuse hemorrhage demonstrated its value as a certain and rapid stimulant. The patient was admitted to the gynecological ward one afternoon, suffering with light labor pains and a slight hemorrhagic flow from the uterus. Examination—Vaginal mucosa of a slight purplish hue; cervix soft and slightly dilated; uterus enlarged to size of a three months' pregnancy. Diagnosis—Pregnancy; threatened miscarriage.

The patient was put to bed and a small dose of codeine administered in the hope that rest and sedative remedies might avert a miscarriage. The pains ceased towards evening and she slept well in the early part of the night, but was awakened about midnight with severe labor pains, which terminated, before an interne could be summoned, in the expulsion of the fetus and a portion of the placenta. Immediately after the miscarriage the nurse observed a profuse flow of bright red blood from the vagina. By the time I reached the ward, twenty minutes after the miscarriage, the patient was in a very serious condition, her pulse being 140 and feeble, and there were many signs of severe anemia. The cervix was dilated only enough to permit the introduction of the tip of the index finger. It was at once evident that nothing could be accomplished in removing the retained membranes without instrumental dilatation of the cervix and curettage, so the vagina and cervix were hastily tamponed and the patient was hurriedly transported to the operating room. No time was lost in the operation, but at its completion the patient was in extreme collapse. Her pulse was almost imperceptible, the respirations were short, jerky, and irregular, and the mucous membranes were excessively blanched.

Previous to this case, infusion of salt solution into the radial arteries had been used in offsetting the effects of hemorrhage, but in this instance it could not be employed. The pulsations of the artery were so feeble that they could not be felt, and therefore no guide to the location of the vessel. After a tedious search the artery was found, but its lumen was so small that neither the infusion canula nor the smallest aspirating needle could be inserted.

In this extremity Dr. Edebohl's plan of infusing salt solution beneath the breasts came to my mind. An aspirating needle was inserted well under the mammary gland, and the reservoir containing the salt solution, 0.6%, was elevated six feet above the bed. The pressure was not sufficient, however, to force the fluid into the tissues, and we forced air into the closed reservoir with the reversed aspirator. Seven hundred centimetres of solution were forced in under one breast, after which a similar amount was injected beneath the opposite breast. Within twenty minutes from the time the salt solution began to flow into the first breast the patient's pulse began to show a marked improvement, and in one hour and a half her condition was so much better that we felt relieved of all anxiety about her.

The plan worked with such signal success in this case that Dr. Kelly at once abandoned the radial infusion, and we have now employed submammary infusion in 41 of the last 225 cases of abdominal section. In many of these cases there was very slight indication for stimulation of any kind, but the simplicity of the procedure and its freedom from bad results of any kind have so commended it that no patient is allowed to suffer from symptoms of depression or shock without its employment. Of the forty-one cases thus infused, none of them have suffered with so much as cellulitis.

Puerperal and General Infection.—While our experience has not been extensive in the treatment of infectious cases with saline infusions, I think the following report of a case, taken in conjunction with the recent favorable literature on the subject, especially in the French papers, points very strongly to it as a highly useful remedy. In observing the case, one of puerperal sepsis, there was no doubt in my mind as to its value from the time the first infusion was given, and each infusion thereafter only confirmed this opinion. The patient was a robust colored woman, who had been a patient in the hospital once before, when she was operated upon for a ventral hernia, which recurred soon after her discharge from the hospital. The hernia grew in size, and the patient again returned to the out-patient department, where she was examined by one of the junior assistants, who found a wide diastasis of the recti muscles, which was filled in by a hernial sac containing a pyriform tumor lying almost entirely outside of the peritoneal cavity. The case was sent into the hospital for further examination, and the tumor proved to be a five-months pregnant uterus. The patient was given a supporting bandage and asked to return to the hospital for her confinement, as we wished to see what progress labor would make without the assistance of the recti muscles. She entered the hospital in December, 1895, and was delivered in a few days of a large, dead, macerated child, which came in breech presentation. The great diastasis between the recti muscles, which prevented their active participation in the expulsive efforts, did not seem to retard the labor in the least. The placenta came away intact, but the uterus was still very large, the top of the fundus being situated above the umbilicus. The uterus did not show any tendency to contract for several days. The day subsequent to her labor the patient had a temperature of 100° F., which ranged for the next three days between this point

* Read before the Gynecological and Obstetrical Society of Baltimore.

Digitized by Google

and 101° F., and then suddenly ascended to 104° F. in the morning, but again went up to 105° in the afternoon. That evening the patient was taken to the operating room and anesthetized. On examination the uterus was still found very large, and the cervix easily admitted the index finger. A thorough digital exploration of the interior of the uterus showed it to be perfectly smooth, and there was not the slightest trace of pathological tissue detected. Consequently, with the exception of a very thorough irrigation with sterile salt solution (0.6%), nothing further was done. For the next two days a continuous current of sterile salt solution was kept flowing in and out of the uterus, in the hope that it might facilitate the elimination of the infection, but it did not seem to affect the temperature in the least and was discontinued. While the temperature would rise as high as 105.5 F., and at one time to 106.5 F., the patient's pulse remained moderately good, considering the grave infection from which she was suffering. The seventh day after she was anesthetized, however, it showed marked evidence of failure, becoming rapid and intermittent, very feeble, and at times almost imperceptible.

By this time the patient's general condition had become very bad. She vomited all of her nourishment, her eyes were sunken, and she presented all of the appearances of impending death. At this time we decided to employ submammary saline infusion as a cardiac stimulant and for its dilutent effect upon the toxins. A litre was first given, and the improvement was most gratifying. The patient felt much more comfortable and her pulse dropped from 100 feeble, intermittent beats to 76 good, full regular beats. Little or no change, however, was noticed in the temperature, which continued high for three subsequent days, when it began to fall; but the relief was so perceptible, even to the patient herself, that she requested a repetition of the treatment. A litre a day was given for seven days, and each time a marked improvement in the pulse was observed. The patient from the first infusion began to improve and finally recovered perfect health.

My attention was called to the subject by a recent editorial in the Medical News, in which the work of Claisse* and Bosc† was reviewed. I quote from the editorial, in reference to septic infection cases, as follows: "Take a patient suffering from severe infection —puerperal, for instance; all organs are affected and are working badly, the temperature is about 104° F; in ten minutes 1,300 to 1,400 grammes of saline solution are injected subcutaneously. Before half that amount has been reached the improvement is manifest. The pulse becomes more regular, fuller, and stronger; respiration is deeper and less hurried, and possibly the temperature falls a degree at the end of the injection. The patient feels better, is brighter, and possibly desires to urinate, but not any great amount. Usually the patient now enters what is known as the critical stage, which comes on generally in four or five minutes, though it may be delayed to half an hour. There is a violent chill, with sensations of extreme cold, strong, rapid pulse, and a rapidly rising temperature. Following this the patient goes through a fevered stage, from which she emerges, the temperature falls, and she may have no further trouble."

In the case which I report, the symptoms correspond to those which Bosc narrates, with the exception of those of the critical stage, which we did not observe. The patient was so extremely ill that these symptoms may have been masked and thus escaped notice. Her temperature showed only the slightest signs of improvement at first, but the pulse became decidedly better after each infusion.

So far we have seen none of the toxic effects which can be produced in dogs by the injection of large quantities of saline solution, and I do not think they need be considered, as in the experimental studies very much more of the saline solution, compared with the bodily weight, is used than in the human being. Certainly there is no occasion for fear of untoward symptoms from the injection of one or even two litres of saline solution at one time.

Method of Infusing Saline Solution.—Graduated glass infusion jars of one thousand cubic centimetres capacity, made according to Dr. Kelly's designs, are used as reservoirs for the solution. The bottles are connected by five feet of rubber tubing to a long, slender infusion needle, the calibre of which is two millimetres in diameter, similar to an aspirating needle. The entire apparatus is sterilized and kept in a sterile envelope, and is available for use at any moment. Before giving the infusion the breast is carefully disinfected, especially well in its dependent area. It is then grasped with one hand and lifted well up from the thorax, while the needle, with the fluid flowing from it, is quietly thrust beneath the gland. Usually, simple elevation of the reservoir is sufficient to force the fluid into the loose cellular tissue, and the breast quickly begins to distend until even a flabby and atrophied organ will reach the size of the puerperal breast, and in a few instances I have seen the fluid shot from the rubber when the breast is quite tense. The needle is quickly withdrawn and the puncture is closed with rubber tissue or adhesive plaster. If the fluid does not flow by its own pressure it can be effectually forced in by stuffing the tube. The hands and tube are well anointed with vaselin; the upper portion of the tube is tightly pinched, and from this point down the tube is gently stripped between the fingers of the other hand, driving the column of fluid ahead into the tissue. The lower portion is then pinched between the fingers and the upper is released, allowing the water to fill the collapsed intermediary portion of the tube. Seven hundred cubic centimetres of solution may be injected under each breast. If care is observed in the cleansing of the breasts and the injection of the fluid no untoward results will follow, which certainly cannot be said of the infusion into the radial artery or vein.—American Journal of Obstetrics.

* Revue de Chirurgie, 1895.

† La Presse Medicale, 1895.

THE WESTERN MEDICAL REVIEW is the best dollar monthly published. Conceit, isn't it? And just think of it,—the price of less than five pecks of wheat gets it for a year.

Digitized by Google

THE TREATMENT OF HEMORRHOIDS BY THE INJECTION METHOD.

BY LEWIS H. ADLER, M. D.,
PHILADELPHIA, PA.,
PROFESSOR OF DISEASES OF THE RECTUM, PHILADELPHIA POLYCLINIC AND COLLEGE FOR GRADUATES IN MEDICINE.

I am sure that my experience in rectal work is by no means unique, in that the majority of patients with hemorrhoidal troubles come to me greatly prejudiced against any operative procedure involving the employment of general anesthesia, and especially the use of the knife. These objections have been raised not only by the laity, but also by physicians who have been similarly affected. Such an argument should not and would not prove a factor in altering the character of advice to be given to a patient were I satisfied that only one plan of treatment could effect a cure; but where a choice exists of several methods of effecting the same or similar results, it is not only our duty, but a necessity for us to respect the patient's wishes.

In a number of instances, sufficient to convince me of the efficiency of the method and to enable me to place my opinion on record, I have treated internal hemorrhoids (in selected cases only) by the injection of carbolic acid. The results obtained in every instance have been eminently satisfactory to patient and myself alike.

I am thoroughly acquainted with the unsatisfactory experiences and the unfavorable opinions expressed regarding this treatment by such authorities as Kelsey, of New York, Matthews, of Louisville, Ky., Allingham, of London, and others of equal eminence, and I am furthermore free to confess that for a long time the weight of this testimony deterred me from giving the method a trial. On the other hand, I have diligently perused the literature, past and present, dealing with the other phase of the question, and after reading the excellent treatise on "Hemorrhoids and Other Non-Malignant Diseases of the Rectum," by W. D. Agnew, M. D., of San Francisco, Cal., I determined to test the merits of the treatment.

External Hemorrhoids.—Agnew admits that the quickest, neatest, least painful, and most desirable way of disposing of any form of external hemorrhoid, cutaneous tag, or like redundant tissue is by excision, but employs the carbolic acid injection in those cases in which the patient is averse to being treated by any plan involving the use of the knife or scissors. He claims that this method effects a cure, to which such persons will readily submit, although informed that a longer time is required for the complete eradication of a tumor thus treated, and that more pain and inconvenience may be experienced from the effects of the operation than would result from that by excision. Personally, I have had no experience with this method of treating external hemorrhoids, preferring and always advising in operative cases the excision of such tumors.

According to the same authority, and as the result of his observations, the objections to the treatment of external hemorrhoids by carbolic acid injection pertain solely to the length of time required for the removal of the tumor—a period of three or four days—and the pain following the injection, which is not intense, but is at times more or less annoying, usually beginning within one or two hours after the operation, and continuing for twelve or fourteen. Agnew advises against the employment of this method in the treatment of external hemorrhoids when inflamed and in a highly sensitive state. He especially notes the care that should be taken when operating on these tumors by injection, to see that quite a considerable portion of the cutaneous surface, especially at the summit of the pile, is affected by the solution applied just beneath the skin; otherwise the skin will become inflamed in order to let out the interior coagulum, which he has often seen come out in three days without suppuration or showing the appearance of much moisture, and in one unbroken cystic-looking mass. The operation is to be performed with a view of cauterizing all of the tissue to be removed, which can be governed only by the dictates of judgment and as a result of experience.

Internal Hemorrhoids.—It is to the treatment of internal hemorrhoids by the injection of carbolic acid that I wish especially to invite your attention, in the hope of eliciting a free discussion as to its merits or demerits, based upon the actual experiences of those who have given the method a fair trial.

Formula.—The formula which I use is the one advocated by Agnew, and the method of its preparation is best detailed by a verbatim description as given in Dr. Agnew's work on Diseases of the Rectum:

"The solution of carbolic acid found to be uniformly successful in the treatment of hemorrhoids is prepared by first making a solution of the acetate of lead and borax in glycerin, in the proportion of two drachms each of the chemically pure salts to one ounce of Price's glycerin.

℞ Plumbi acetat.,
Sodii biborat., ... aa ʒ ij.
Glycerinæ . . . . . fʒ j.

Mix in a graduate, pour into a two-ounce vial, and let it stand for twenty-four hours.

"The solution of the salts is hastened by placing the vial in a warm water bath and allowing it to remain there for fifteen or twenty minutes. The glycerin can be handled to a better advantage, and its measurements more accurately made and retained, by warming it, as well as the graduate, before it has been poured into the graduate and the chemicals have been added.

"Select Calvert's No. 1 crystallized carbolic acid and pour a sufficient quantity, liquefied by warmth, into a two-ounce graduate to measure one ounce, and add two drachms of distilled water. To this add enough of the glyceride of lead and borax previously made to make the combination measure exactly two ounces.

℞ Acidi carbolic (cryst.) . . . ʒ j.
Aquæ destillat. . . . . fʒ ij.
Sodii biborat. et plumbi acetat. et
glycerin . . . . . fʒ vj.

Misce et sig.: Solution for hemorrhoids.

Digitized by Google

"The object of the water in the formula is to lessen the syrup-like consistency of the preparation. Should equal parts of crystallized carbolic acid and the glyceride of lead and borax be combined, the solution will be found rather too heavy for convenience. It will not flow through the hemorrhoidal needle as freely, nor take hold of the tissues when injected as quickly, as does a solution containing a small proportion of water.

"Be particular in the weights and measurements, and the purity of the ingredients entering into this preparation, as anything unnecessarily irritating should be scrupulously avoided. I have tried synthetic carbolic acid and found the odor of tar to be decidedly stronger, and believe it much more acrid and irritating than the commoner preparations; neither can I see that anything is gained by using vegetable glycerin.

"Some make no allowance, in attempting to give the formula, for the increase in bulk of the glycerin occasioned by the addition of the one-half ounce of solids, and direct that the ounce of carbolic acid be added to the full amount of the glyceride of lead and borax when made. By this inadvertence not much over a 35% solution of carbolic acid is obtained. After trying the acid in varying strengths and watching its effects, I have concluded that not less than a 50% solution should be used. The addition to the solution of the acetate of lead is designed to restrict the action, and that of the borax to lessen the irritative properties of the acid. The acetate of lead not only keeps within limit the distribution of the acid at the time the solution is forced out of the hypodermic syrings, but of itself combines with a certain portion of the albumin of the blood and other tissues, forming the albuminate of lead. If I were to make a change in the formula it would be toward an increase rather than a diminution of the quantity of acid."

Preparatory Treatment.—This includes a careful study of the patient's physical condition. I would advise against the employment of the injection treatment in cases predisposed to phthisis, or already affected by this disease, and in diabetes or in chronic diseases of the liver, heart, or kidneys.

During an acute inflammatory attack of hemorrhoids is not a favorable time to operate, on account of the engorged condition of the rectal vessels and the irritability of the mucous membrane of the bowel. Such conditions should be relieved by local medication and by remedies directed towards regulating the bowels and increasing the activity of the liver.

Operation.—At the time of the operation the hemorrhoids are exposed by inducing the patient to have a stool or to sit over hot water. It is advisable to smear vaselin over the muco-cutaneous surfaces prior to operating, as advised by Agnew, in order to prevent the solution used for the injection coming in contact with the parts.

The patient should be placed in Sim's position, and the hemorrhoid being sufficiently well exposed, it is to be punctured at its most accessible point, preferably about midway between its base and apex, and the point of the needle passed to about the center of the growth. Care must be exercised that the needle's point is inserted beyond the proximal end of its opening, as otherwise the preparation will be injected on the outside of the tumor. In a large growth eight or ten punctures may be found necessary.

The injection is to be inserted slowly, several drops at first, then drop by drop, watching the action of the solution as shown by the change of color that creeps over the surface of the pile. This change of color, Agnew states, is quite marked with hemorrhoids of a delicate covering, less so with those possessed of more fibrous coats. The needle should be held in position for a short time, and if the quantity injected appears to be less than needed, more of the solution should be used. Agnew states that the solution takes effect slowly by virtue of its astringency and syrup-like consistency, and no doubt extends farther than is always apparent at the time of operating. If the hemorrhoid be large, and its cavities filled with blood exhibiting strong arterial pressure, more time will be occupied in performing the operation than is generally supposed, as many as twenty or thirty minutes occasionally being required. The time is taken up in such cases by holding the needle in place until assured that sufficient of the solution has been used to effect the desired result. If the part feels doughy or springs up under the finger like an elastic ball when pressed, or blood flows freely through the place of puncture after the needle has been withdrawn, either enough time has not been allowed for the preparation to take full effect, or a sufficient quantity has not been injected.

After the entire cavity of the tumor has been thoroughly reached by the injection, and in a large tumor a few drops have been deposited on the surface of the pile, so as to be sure of thoroughly cauterizing the more dense tissue of its integument—which, Agnew states, might otherwise inflame, creating unnecessary pain and suffering—the hemorrhoid is to be thoroughly dried, covered with carbolized vaselin, and returned within the bowel. Several tumors may be treated in this manner at one operation, and I have seen no bad results ensue, although I have used several drachms of the solution in a single treatment.

No speculum is required, as a rule, in this method of treating hemorrhoids.

The needle required for the hypodermic syringe employed in giving these injections should have a little larger bore than the needle employed for ordinary hypodermic use, so as to permit the fluid to flow through readily, which the smaller needle prevents, owing to the consistency of the injection fluid.

After Effects and Treatment Following Operation.—In some cases pain is experienced several hours after the operation, but it is usually controlled by suppositories of the aqueous extract of opium, one-quarter of a grain, and the extract of belladonna, one-eighth of a grain, used pro re nata. Difficulty in urinating may occur, and is usually relieved by a hot water bag applied above the pubes, or by a sitz bath. Catheterization is seldom required. A desire to have the bow-

Digitized by Google

els moved can be allayed by the suppositories and by hot water compresses applied to the anus.

I do not endeavor to confine the bowels for any definite period after this operation; usually the patient's fear of having a movement effectually restrains such a desire, and on the third day I am in the habit of ordering administered fractional doses of calomel and soda, followed by a saline. Just preceding the time the bowels act I order given a rectal injection of eight ounces of carbolized oil (2% carbolic acid) or an injection of slippery elm tea or of borax water (a dessertspoonful of borax to the pint of water).

A peculiar odor, sometimes noted when the coagulum is being thrown off, should not be interpreted as indicating suppuration.

Agnew states that to effect a safe, speedy, and radical cure of a case of hemorrhoids it is desirable to get rid of the tumor bodily, not by shrinkage or contraction, leaving a hard or indurated prominence, subject to resuscitation and a return of the old malady, nor by inflammatory destruction, but by a separation of the spongy and vascular growth from the normal tissue of the body, the same as if it were dissected from its remotest attachments. This is obtained by putting a sufficient quantity of the preparation recommended just where it is required, and such results will invariably follow.

My experience with the treatment thus far leads me to endorse most heartily Dr. Agnew's strong recommendation of the method which he has so successfully employed for a long time.

Personally, I cannot speak authoritatively regarding the permanency of the cure effected by the carbolic acid injection of hemorrhoids, for I have not had an opportunity of observing cases treated by this method for a longer period than two years, but from my observations I am inclined to believe that it is a radical procedure.

Regarding the dangerous results following this treatment—of carbolic acid poisoning, embolism, sloughing and ulceration, or their sequelæ, abscesses or fistulæ—I have not witnessed any such results, and am loath to believe that they do occur if the operation be performed carefully and skillfully and with a proper observance of aseptic principles.—Therapeutic Gazette, August 16.

WHAT OUR FRIENDS SAY.

We print below selections from a few of the complimentary letters we have received. "There are others":

"I am well pleased with the REVIEW and wish you merited success."—Alex. Bear, M. D., Norfolk.

"Accept my congratulations on the WESTERN MEDICAL REVIEW. It is equal, if not superior, to many of the so-called leading medical journals of the east which I have been reading for the last twelve years. Continue and victory will be yours."—Ed Wirth, M. D., Omaha.

"You are succeeding admirably in furnishing us a journal that is worth much more than you are charging for it, and I, for one, certainly do appreciate your efforts.—George W. Ira, M. D., Santee Agency.

"I am very much pleased with the REVIEW."—Ira E. Atkinson, M. D., Dodge, Neb.

"I am well pleased with the excellent journal you are giving us. Long live the WESTERN MEDICAL REVIEW."—E. L. Robinson, M. D., Central City.

"I am very much pleased with the REVIEW so far, and express a wish for your future success."—W. W. A. Chatterton, M. D., Lake City, Ia.

"I am very much pleased with the tone of your journal. It is pure, clear, and concise, and worth many times the amount it costs."—William F. Fee, M. D., Williamsburg, Kan.

"I am pleased with the REVIEW. I think it is a way-up journal."—S. F. Blair, M. D., Valley, Neb.

"I have been very much pleased with the REVIEW, and I think it can take front rank with the leading medical journals of this country if it maintains the tone and standard it has maintained thus far."—Chas. Rosewater, M. D., Omaha.

"I am much pleased with the REVIEW; in fact, like it better than any other journal I get."—G. M. Prentice, M. D., Fairfield, Neb.

"I prefer your journal to all others, and every physician, in Nebraska at least, should take it."—F. Simon, M. D., Oakland, Neb.

"I think you are to be congratulated upon the good appearance of your journal and the good quality of its material."—Hobart Amory Hare, Philadelphia.

"Your journal is highly appreciated. I have seen no eastern publication to compare favorably with it."—A. R. Ray, M. D., Fairfield, Neb.

"I am glad to see the high standard of the journal maintained, which certainly insures its success and influence."—H. P. Hamilton, M. D., Omaha.

"I appreciate the REVIEW very much."—A. B. Anderson, M. D., Pawnee City, Neb.

"Your journal is all right. Keep up the gait you have struck and you will come under the wire with flying colors."—J. M. Emmert, M. D., Atlantic, Ia.

"As long as the journal is kept up to the present standard it will receive my subscription regularly every year."—M. T. Zellers, M. D., Hooper, Neb.

HONORS MISPLACED.—An Englishwoman recently met with sudden death during a visit to St. Petersburg, and at the request of relatives in London the body was immediately forwarded to England. When the casket, a magnificent affair, arrived at its destination, the lid was removed to give the sorrowing relatives a final look at the departed. But instead of the emaciated remains of an aged woman, the portly corpse of a Russian general, covered with decorations and in the full glory of a state uniform, met the gaze of the mourners. Frantic messages were at once dispatched to the Russian capital, and in response to one of them the following message was received: "English lady buried yesterday with military honors. Please keep the general."

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$1 00
Single copies..... 10

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, SEPTEMBER 15, 1897.

THE WESTERN MEDICAL REVIEW contains more reading matter free from advertising than any other monthly medical journal published at a dollar. There are very few of the two-dollar monthlies that equal it. Compare it with any medical journal you please and see if our statement is not correct.

KOCH'S NEW TUBERCULIN (T R).

The German periodicals are full of reports of cases treated with Koch's T R; and it must be confessed that they are decidedly disappointing. It seems to have very much the same influence on lupus that the old tuberculin had, i. e., it produces remarkably rapid improvement and some apparent cures; but whether these will prove any more enduring than those obtained with the other preparation remains to be seen. In the treatment of phthisis, it will be remembered, Koch did not expect to see results in cases of mixed infection or where the temperature rose much above 38° C.; and even in this limited class the results are not at all brilliant. Some improvements are noted, but these, as a rule, are not more marked than are obtained by non-specific treatment. Even with a very gradual increase of the dose severe constitutional symptoms are sometimes observed; and although no fatal cases have been recorded, Muller reports a case in which an acute miliary tuberculosis of the ear broke out, apparently as a result of the treatment. For the present, therefore, it would seem well for the western practitioner to await further developments before investing largely in T R.

MEDICAL SOCIETY OF THE MISSOURI VALLEY.

The approaching annual meeting of the Medical Society of the Missouri Valley is not without interest to many physicians. It affords two phases of great importance—its scientific and its social. The former is of the greatest value in stimulating progress in medicine, while the latter, as a promoter of good feeling, is scarcely less desirable. The fact that the society's sessions last but a single day is thought by many to be an advantage; the scientific work being done during the day and early evening, the banquet coming later. After a hard day's work comes the needed relaxation; the renewal of old acpuaintances and friendships and the making of new ones. Whatever encourages this sort of thing between doctors we regard as being most desirable, for along with it is sure to come a better feeling than now pervades the profession.

The Missouri Valley has won the reputation, and, we think, justly, of being the working society of the west. At every meeting many good papers are sure to be read and discussed by gentlemen who occupy the front rank in the profession, and who, by reason of their training and experience, are best fitted for such discussion. The laity hold many notions concerning the profession that are difficult of explanation. One of them is that only idlers and those without a practice attend medical societies, while the best and busiest physicians remain at home. Nothing can be better established than that, as a matter of fact, the very reverse of this is true. The leading medical men the world over are the frequenters of medical associations. If a series of meetings of local, state, seminational, national, or international meetings be examined as to those who attend, the greatest names of the locality, the state, or the nation will be found on their registers.

The benefits of these learned societies have been so often set forth that a repetion of them need not be made here. As is well known, it is at these gatherings that the researches and experiences of the leading spirits of the profession are interchanged and discussed. The lamp of knowledge is here kindled by the striking of steel against flint. These are the men that foster and stimulate progress, the men who appreciate true culture and learning, and do more than all others combined to elevate the standard of the profession by raising it above the mere consideration of money-getting; men who comprehend that in the study of medicine may be found the greatest intellectual benefits and enjoyments, and that its practice calls for many of the most noble characteristics to be found in the social body; that medicine is conducive, not only to the purest intellectuality, but to the highest ethical state as well, the most exalted altruism.

WHAT IS OSTEOPATHY?

"What is osteopathy?" asked Governor Tanner, of Illinois, of the leader of the osteopaths when they were before him to urge him to sign the bill which the

Digitized by Google

intellectual legislature had passed recognizing them as physicians. "What is osteopathy?" The leader did not tell what it was. He couldn't, in the first place, and if he could, neither he nor any other man would have the cheek to get up before a body of intelligent men and insult them by asking them to believe the absurd "theory" they are asking people to believe. And especially if there was a chance for questions to be put afterwards. "What is osteopathy?" The rank est rot, the silliest slush, the most idiotic tomfoolery that one mortal man ever concocted for another to believe. This is what "Doctor" G. W. Tull tells us in the Northern Osteopath:

"A knowledge of the functions of each and every part of this machine (the body) implies a thorough knowledge of the vital phenomena of the organism of man. That exceeedingly complex and elaborate system of electric wires, that ramify through every part of the body, called the 'nervous system,' is the most important factor. If any of these wires become 'grounded,' or, in other words, if they become compressed by the partial or complete displacement of a bone or its attachments, ligaments, and muscles, their connection with the great storage battery, the brain, is cut off, and as a consequence there is loss of force to the organ or parts which are innervated. A functional derangement of the parts ensues."

What reply can be made to such a statement as this? None whatever. To argue against such stuff as this, and against some other we shall quote, would be like arguing against the insane arguments of an inmate of a lunatic asylum. The fact is, fighting such crazes more often helps than hinders their growth. And yet, are we to sit still and let legislatures pass bills recognizing such cranks as physicians? But let us read a little more of their answer to our question, "What is osteopathy?" One says: "Osteopathy levels down and evens up mechanical and functional irregularities. The osteopath has a trained and sensitive touch, and a perfect knowledge of nerve centers in general, and some not down in the books, or even known to other schools." What do you think of that, you anatomists and physiologists who know so much? These osteopaths have discovered nerve centers in a few short months that you have overlooked lo! these many years. "He has and holds the facts and forces of the human body at his fingers' ends, and he directs them towards the equilibrium of health." No wonder they can perform wonders. "The special nerve centers and principles by which some of the greatest remedial effects are secured in this science and art were discovered by Dr. Still, and are neither recognized nor understood by any other school." What a wonderful man this Dr. Still must be, to be sure. And here is one of their cures:

"A patient of an M. D. had been treated for a painful leg that was swollen to twice its size. An osteopath saw that the blood that flowed into the leg by the arteries could not get back by the veins, and became stagnant; so he simply removed the obstruction at the 'saphenous opening' and let the clogged blood get out into the 'vena cava.' The operator removed the mechanical obstruction, and then stimulated the nerve centers controlling the circulation in the leg, and health returned."

But here is something for the obstetrician:

"Obstetrics can be made marvellously easy by a simple use of the mechanical principles controlling the fundus and the cervix of the uterus; and a fair illustration of this is a bag of apples, the contents of which you wish to empty—the contents roll out naturally when you loosen the string by which the mouth of the bag is tied."

Yes, there you have it. All that you have to do is to loosen the string and let out the child.

"We are bold to say that the knowledge of anatomy and physiology, and the therapeutic application of this knowledge to disease, that is given in the course of instruction in 'The American School of Osteopathy' cannot be duplicated anywhere in the world."

We grant it without argument. But what a shame it is that it costs so much to get this knowledge. Five hundred dollars for eighteen months' instruction seems to be lots of money, but when we find out how much they get, it is dirt cheap after all. And their "treatments" are cheap, too. Only twenty-five dollars for twelve of them, or fifteen dollars for six. There is one thing these fakes teach us, and that is that it does not pay to work for nothing. The Christian Science people follow the same rule. There are no free clinics with them. Not much. That is not what they are on earth for.

What is osteopathy? One per cent. massage—a splendid thing in its place, by the way—and the other 99% is made up of humbug, mystery, sophistry, and rot,—principally the latter, all beautifully mixed up with words, words, and words, elegantly sugar-coated to catch fools with money, of whom there are several.

WHO ARE TO BLAME FOR HOSPITAL ABUSE?

The Methodist Hospital of Omaha has recently gotten for itself a reputation that is not at all enviable. A circular which emanated from that institution found its way into one of the leading eastern medical journals, and it certainly would make the medical men who are connected with that hospital blush with shame, if it were not for the fact that they were not responsible for it. It was the most "quackish" circular that can well be imagined, and would put the worst of the St. Louis circulars advertising the fifty-cent hospitals in the shade. But the funny part of the thing is that while it puffs the nurses and the institution, it has not a word to say about the

Digitized by Google

medical staff. Speaking of the nurses, it says: "They are unsalaried, not because they cannot earn or have not a right to a salary. They do without a salary because they are so situated that they can." What about the medical staff? Is that the reason that they can do without a salary, because they are so situated that they can? For they certainly do not make much out of it, judging from another part of the circular, where it states that three-sevenths of the total number of patients during the year "were wholly charitable cases, and a very large part of the remaining four-sevenths were unable to pay anything except a very meagre sum towards defraying the expenses of their own care," showing that the poor doctors were left to put up with what glory there might be connected with it.

We clip the following from the circular, which shows its aims, but it ought to be seen to be appreciated:

"Any person in good health may become an active member for one year upon the payment of ten dollars ($10) in advance, or may become a life member upon the payment of two hundred and fifty dollars ($250) in advance. Active members may be continued upon the payment of $10 each year, but shall cease immediately upon the expiration of the time already paid for."

"Each active and life member shall be entitled to a certificate of membership, signed by the president and countersigned by the membership secretary, entitling him or her to free admission to the hospital for one year, including bed, board, nursing, medical and surgical care in case of sickness, to the full capacity of the institution to receive them. But all patients who have sufficient means will be required to pay for necessary surgical appliances."

* * * * * * *

"A two-edged sword cuts both ways, and accomplishes its mission in either direction. So does your membership fee. If you have occasion to use the hospital as a member, you have the first right to accommodations, above any other class of patients, and you will be most tenderly cared for. If the Lord spares you in perfect health, your money will assist the institution in caring for some one else not able to pay. It thus becomes a sweet charity whose fragrant memory will follow you all your life."

The following are the facts as we gather them from several sources: A little while ago one of the members of the staff, while visiting the hospital, saw one of the nurses folding and mailing circulars, which, upon examination, he found to be the ones referred to above. Seeing what they were, he asked how many had been mailed, and found that about two hundred had been sent out at that time, principally into Missouri. He asked that no more be sent until he could see those in authority, and that ended the sending out of the circulars. The members of the staff immediately took steps to suppress them, and laying the matter before the trustees, showed those gentlemen the outrageousness of the thing. With that the five thousand circulars were burned, except the few which had been previously sent out. They had been gotten up by the president of the board of trustees, with the authority of the board, but without saying anything to the staff about it. So much for this matter.

The members of the staff of the Presbyterian Hospital of the same city some months since were asked to give something to help fit up the building into which the hospital had just been moved, and they, in the generosity of their hearts, handed over their checks like little men. The following month all but one or two received notes informing them that they were relieved from the staff of the hospital. Their money was gone, but whether they have learned anything from the experience we have not been informed.

When the methods of those running the so-called fifty-cent hospitals in St. Louis had been exposed the majority of the better men, in fact, all of the better men, connected with the medical staffs resigned. They said that they did not know that such schemes were being worked to get patients, and the probability is that this was true in the majority of cases. The lay management were the ones responsible. And so, when the matter is looked into, it will be found that, in the majority of cases, the ones responsible for the abuse are not the medical staffs, but the "trustees," the "board of managers," or the well-meaning—in some instances—ladies and gentlemen who look after the management of the institution. All they care for is to make it pay; to get money to run it. They care nothing for medical etiquet, or any other kind of etiquet, for that matter, in too many instances. That is a side issue with them. They do not select the staff with any other idea than that of "policy." The gentlemen who make the hospital a possibility—the medical staff—are put in and kicked out without any regard to their wishes in the matter. The trustees know perfectly well that if the staff as at present constituted does not suit them, they can turn part or all of it out and find plenty to take the places. The pious Presbyterians referred to above probably thought that they were doing a religious act when they got the money of the gentlemen and then asked them to step down. The gentlemen who got up the quack circular of the Methodist Hospital did not seem to care whether the staff would be pleased or not at what they were doing. The only wonder is that the trustees did not tell these gentlemen to attend to their part of the concern. But to their credit it must be said that they respected the

Digitized by Google

wishes of the staff, and recognized the justice and wisdom of the stand they took.

Before we censure the medical men connected with the various institutions guilty of abusing the charity which is supposed to be the foundation of hospital management, let us inquire into the matter and see if the blame does not lie somewhere else. Not always will this be found to be true, but more often than is generally supposed. That the profession is indirectly responsible there is no doubt, for if the profession was UNITED the medical men connected with these establishments could say that such and such things should or should not be done, and that would end it. No clinic, no dispensary, no hospital, can run without physicians and surgeons. They are the most important element connected with such institutions. But when a medical staff resigns in protest against the action of the management of an institution, another body of men is ready to jump at the chance to take their places. And there you are. When the millennium comes the medical profession will stand together, but the millennium is evidently a long way off just at present.

Apropos to the above, we call attention to the action of the British Medical Association, referred to in another column, where that body turned out two of its members for taking the places in the Adelaide Hospital, Australia, made vacant by the resignation of the staff in protest against the action of the managers of that institution.

Notes and News.

LORD WOLSELEY, commander-in-chief of the British army, is said to be suffering from cancer of the throat.

THE St. Louis Medical Society proposes to expel all its members who remain connected with the fifty-cent hospitals.

THE Medical Record estimates that 25,000 students will register in the medical colleges of the United States this fall.

IN England there is one medical college to 2,300,000 people. In the United States there is one medical college to—no, we won't give it. The comparison is too great.

NEBRASKA was represented at the meeting of the British Medical Association by Dr. F. D. Haldeman, Ord, Dr. H. B. Lowry, Lincoln, and Dr. J. J. Cameron, Kearney.

THE College of Physicians and Surgeons of Chicago will hereafter admit women students. This being true, what will Prof. G. Frank Lydston do with some of his stories?

KANSAS CITY, Kas., and Kansas City, Mo., are each to have a new medical college this fall. It is simply a case of the "outs" wanting to be among the "ins," that is all. Kansas City, Kas., now has three medical colleges, and Kansas City, Mo., has five.

MRS. BERTHA M. SESSFORD, a Christian Scientist, is being tried before Judge Mills, in the District of Columbia, for practicing medicine illegally. She was treating a child with diphtheria, who died while under her care.

DR. E. L. HOLMES has resigned from the staff of the Illinois Eye and Ear Infirmary on account of the policy adopted by the political managers recently appointed by the governor. Dr. W. T. Montgomery also resigned for the same reason.

A LAPAROTOMY was done on a woman in Paris recently for fibroid tumor which resulted in death. The autopsy revealed the unpleasant fact—for the operator—that a pair of forceps had been left in the abdomen. The surgeon was prosecuted and sentenced to three months' imprisonment.

BANANAS should never be eaten raw, as they are indigestible and full of germs. When baked a pound of bananas equal in nourishment twenty-six pounds of bread. If this be true, and the New York Medical Times is our authority, what a godsend a few pounds of baked bananas would be to the Klondikers.

DR. E. C. HENRY, a graduate of Creighton Medical College, 1896, who has been doing post-graduate work in the east since his graduation, has returned to Omaha and will take the chair of anatomy in the Creighton college this winter. Dr. W. E. Harris, who has been filling that chair, has returned to his old home in Illinois.

OUR promised report of the British Medical Association at Montreal is unavoidably put off till next month, as Dr. Lowry did not return in time to prepare it for this issue. The October REVIEW, however, will contain a report quite as full as the one on the second Pan-American Medical Congress, which appeared in our December number.

A WOMAN recently died in England at the age of seventy-seven who had spent the last thirty-nine years of her life in bed. There was nothing the matter with her, but she thought that lying in bed was the most pleasant occupation in the world, and so she adopted it. There are others who seem to have the same idea, but do not carry it out.

DR. C. D. EVANS, of Columbus, is rusticating down in the Ozark mountains. Rumor has it that the doctor has a large interest in certain mines down there that are likely to make him too wealthy to practice medicine. Rumor also says that the doctor was recently offered $50,000 for his share, but that he expected to do much better than this in a very short time.

THE Iowa Medical Journal is agitating the question of too many medical colleges. It wants to do away with all but one in Iowa, and that one to be connected with the state university, or rather be a part of it. But it wants this removed from its present location, Iowa City, for the good and sufficient reason that a town of but 7,500 inhabitants is not large enough

Digitized by Google

to insure sufficient clinical advantages. The object in view is a good one, and will be endorsed by a vast majority of the profession of the state, but will not be endorsed by those who could, if they would, make the change—those connected with the present colleges. There are, we believe, six medical colleges in Iowa, and Brother Kime will have his hands full if he attempts to wipe five of them out of existence. It can't be done.

THE next meeting of the International Medical Congress is to be held in Paris, in 1900. Professor Lanneloque is the president of the organizing committee. The meeting just closed was attended by 7,300 members. Of this number over 3,500 were from Russia, 800 from Germany, 700 from Austria, 400 from France, 300 from Italy, 300 from England, and 120 from the United States.

DR. SHELDON E. COOK, of Lincoln, was married August 19 to Miss Emily J., daughter of Mr. and Mrs. Samuel Daniels, of Terre Haute, Ind., the ceremony taking place at the residence of the bride's parents. The honeymoon was spent in Canada, the doctor and his bride returning to Lincoln on September 10. Dr. Cook is a frequent contributor to the columns of the WESTERN MEDICAL REVIEW, and we wish him and his bride a long, happy, and prosperous life.

IN order to test the theory of the prosecution in the Luetgert murder case, a body weighing 150 pounds was boiled in a solution of crude potash in the laboratory of Rush College. In two hours and a half not a particle of the body could be discovered. Luetgert, who was a sausage-maker in Chicago, is charged with killing his wife, and the claim of the state is that after murdering her he completely destroyed the body by boiling it in crude potash in one of the vats in the basement of his factory.

ASLEEP FOR THREE MONTHS.—Nebraska has a sleeping boy. He is fourteen years old, and has always required more sleep than most boys of his age, often spending sixteen or eighteen hours in bed. For the last three months he has remained in bed altogether, during which time he has barely opened his eyes a half dozen times. Food in liquid form is forced into his mouth and swallowed.—Medical News.

Where is this boy? If any of our readers know anything about him, let us hear from them. We do not like to have Nebraska slandered this way. It is not the rule for Nebraskans to sleep all the time.

AT the annual meeting of the British Medical Association, held in July in London, previous to the general scientific meeting at Montreal,—for this association separates its professional from its business meetings,—two of its members were expelled. These were Dr. Leith Napier and Dr. Ramsay Smith, both of Adelaide, South Australia. Some time since all the members of the staff of the General Hospital of Adelaide resigned their position on account of the action of the governing body. Whatever the action was, the staff seemed to have the sympathy of all the profession of that colony, for none would take the vacated places until the action of the governing body was rescinded, except Drs. Napier and Smith. These two gentlemen did so, and the profession in Australia preferred charges against them in the local branch, with the result that a recommendation was made to the parent society that they be expelled from the association. The resolution expelling them passed in the proportion of 74 to 3.

THE OMAHA MEDICAL COLLEGE.

The Omaha Medical College will open on the 28th of this month. Judge Keysor will deliver the opening address on the evening of the 28th, at which time the building will be thrown open to the guests. This, the oldest medical college in Nebraska, has established itself as one of the most solid institutions of its kind in the west, and with a faculty equal to any in the country. Its building is well adapted for its purpose, and is thoroughly equipped in all its branches. The present prospects are that it will have during the current year the largest number of students that it has had during its history.

MEDICAL DEPARTMENT OF THE TRANS-MISSISSIPPI INTERNATIONAL EXPOSITION.

Dr. E. W. Lee, of Omaha, has been appointed medical director of the Trans-Mississippi Exposition, and is making preparations to have his department perfect in every way, as far as it is possible to make it. The plan as at present laid out is to have in the building devoted to the medical department a hospital that will accommodate thirty patients, divided into two wards, male and female. In connection with these will be an operating room for actual service, fitted up with the latest and most improved apparatus and methods for treating cases of heat stroke, and all kinds of accidents and emergency cases that will be likely to occur at such a time and place. There will also be a general office and dispensary. This will comprise one wing of the proposed building. The central portion will consist of a general reception room, and rooms for the accommodation of the nurses and attaches. In the central part of the building will also be the cooking department. The other two wings will consist of a general medical and surgical exhibit, such as a model operating room for exhibit, fitted up in the latest approved aseptic methods, with exhibits of all the latest operating room accessories. There will also be a model ward, for exhibit only, and to contain ward furnishings of the latest improvements. Besides this there will be accommodations for all medical and surgical exhibits, of every kind. One large room will be devoted to a medical and surgical museum, for the exhibition of natural and pathological specimens, and the profession will be invited to send anything of this character they may have for exhibit. It is expected, however, that the bulk of these exhibits will come from the army medical museum at Washington.

There will also be established a complete ambulance corps, thoroughly drilled, with both the horse and the new bicycle ambulance in use. The exposition guards will be drilled in rendering first aid to the

Digitized by Google

injured, and stretchers and emergency supplies will be distributed about the grounds. There will also be established a field hospital, under the immediate supervision of an army surgeon, showing the methods of transportation and caring for the sick as in actual active army service. In case of great emergency this will be brought into actual service, but exhibition drills will be held as occasion requires. The hospital and ambulance corps will be made up principally from young medical graduates, thereby giving them an opportunity of gaining experience in the treatment of emergency cases, both medical and surgical. A sanitary department will be established, looking after the drainage and water supply, and the general sanitary arrangements of the grounds. In fact, everything will be done with two objects in view: First, to care for the sick and injured in the most expeditious and scientific manner, and to prevent illness and accidents by guarding against these in advance as far as possible; and second, to educate the masses in general, and the profession in particular, in the latest, most approved, and best methods of hygiene, caring for the injured, and ministering to sudden cases of illness.

In preparing for this exposition the director of the medical department has taken advantage of the experience of the managers of like departments in the expositions of Chicago and Nashville, etc. In the first two months of the Nashville exposition there were over three hundred medical and one hundred surgical cases treated on the ground, and preparations will be made for handling twice this number of cases here.

The hospital service will be for emergency cases only, and no case will be kept over night where it is possible to transfer to another hospital, or to the residence or hotel of the patient.

THE JOHN A. CREIGHTON MEDICAL COLLEGE.

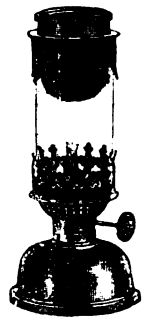
John A. Creighton, the only millionaire of Nebraska who has shown any evidence of a decided interest in things medical, has just completed a magnificent building, which he intends shall be used by the medical college bearing his name. With his usual generosity, he has spared neither pains nor money in the erection of this building, and to-day Nebraska can boast of one of the best medical college buildings in the country. The building is located on the corner of Fourteenth and Davenport streets, Omaha. The building is 66 feet wide and 132 feet long. It is built of brick and stone, and in design is a modern adaptation of the Italian renaissance. It consists of a basement, three stories, and a central extension, making that part four stories in height. The interior of the building is finished in massive oak, giving an appearance of richness and stability rarely found in public buildings, and especially in medical colleges. The south half of the first floor is occupied by faculty room, library, and students' reading room, while the north end is given up entirely to dispensary clinic rooms. On the second floor are found two lecture rooms and the laboratories for histology, pathology, and bacteriology, and also the private rooms for the professors of each of these branches. On the third floor are the chemical laboratory, the museum, and large amphitheatre. The fourth floor is entirely taken up by the anatomical rooms. These rooms comprise a dissecting room, finished and furnished in the most modern style and capable of accommodating one hundred students dissecting at the same time, and a large cold-room, with chemical cooling apparatus, where material may be kept in a fresh state for an unlimited length of time.

The smaller lecture rooms have a seating capacity for the accommodation of 150 students each, while the larger will accommodate 350. The different laboratories have a working capacity of from seventy-five to one hundred students. The entire building is heated by steam, and the ventilation is as perfect as can be obtained. The plumbing is of the best, each floor being supplied with wash-rooms and lavatories. The building is lighted throughout by both gas and electricity. The furnishings and apparatus for the different rooms and laboratories are all of the latest and the best, the lecture rooms all being seated with opera chairs, and the laboratories being supplied with the most modern equipment.

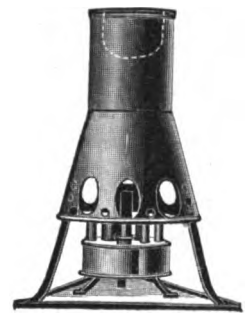
The state, the city of Omaha, and the physicians composing the faculty of the Creighton Medical College are certainly to be congratulated on the possession of such a building, with its elaborate furnishings and appointments. On the evening of the 27th of this month a reception will be given and the building thrown open to the inspection of the public.

Miscellaneous.

A NEW DISINFECTING AND DEODORIZING LAMP, AND A NEW FORMALIN DISINFECTOR.—We present illustrations of a new disinfecting and deodorizing lamp for household use, and a new formalin disinfector. In this disinfector the formalin is employed as pastils (Paraform), instead of the formerly used fluid form. The pastils are vaporized and the formalin given off in its gaseous form, i. e., its most active form, as it thus penetrates everywhere in the room and the most resistant pathogenic forms are entirely destroyed. Other advantages are the even distribution of the gaseous formalin, the cheapness and simplicity of the apparatus, and the fact that it does not injure fabrics, etc., thus making it unnecessary to remove furniture,



Formalin Lamp.



Formalin Disinfector.

ornaments, etc., from the room to be disinfected. To disinfect a medium-sized room from 100 to 150 pastils are vaporized.

Digitized by Google

The disinfecting and deodorizing lamp is constructed

on the same principle as the formalin disinfector, but is smaller. The light need not be extinguished, as the lamp burns out with perfect safety. Pathogenic organisms of moderate resisting powers may be effectually destroyed by the use of this lamp, foul odors removed, and a preservative influence lasting two or three days given rooms containing food tending to decomposition. Alcohol or wood alcohol is used in both to vaporize the pastils, two ounces lasting from two to four hours in the lamp, according to the flame, while in the disinfector the reservoir is filled three-quarters full of alcohol, or one-half full if wood alcohol is used. These are supplied by Schering & Glatz, New York.

THE COUNTRY DOCTOR.

Whoever imagines the rural practitioner is necessarily an old fogy, or ignorant of the devices which the hospital-trained city resident has at his command, and acts accordingly, is more than likely to be undeceived in short order. If the country doctor seems a little behind the times in some things, the lack, if such there be, will generally be compensated for by the greater thoroughness with which his knowledge has been digested and assimilated. During the long rides over roads often devoid of anything new to attract attention, he has opportunities for thought which are unrivaled, and he turns a subject over and over, viewing its every aspect in a calm, deliberative spirit day after day, until the facts connected with and bearing upon it are classified, labeled, and pigeon-holed, so to speak, accurately; carefully and intelligently put where they may be found at any moment in a condition ready for immediate use.

The country doctor appears at his best in times of grave emergency. The very nature of the life he leads; the way in which circumstances compel him to practice his profession, breeds a self-confidence and coolness which, in the presence of danger, give him an advantage in a hand-to-hand combat with the king of terrors, often enabling him to snatch victory out of the jaws of defeat. In his somewhat sparsely settled field of labor the assistance of a brother practitioner may not be obtainable for hours, nor the drug store, nor his own stock of remedies much more available, and many a time and oft is he called upon to meet and obviate difficulties appalling to one less resourceful. With the inefficient aid of the members of the family, well-nigh paralyzed with fear of disaster which shall rob them of a loved one, or half fainting from the sight of blood or excruciating agony, and the comparatively few remedial agents in his satchel and in the domestic medicine chest, he not infrequently faces and overcomes almost overwhelming odds. Many of his methods would horrify the hospital surgeon and accoucheur, by whom the numerous details of the practice of the antiseptic doctrine are invariably carried out to the letter. But the cases of amputation performed with a pen or a butcher knife, of arteries tied with linen thread from the matron work basket, of embryotomy and other measures utilized in the treatment of hysteria, accomplished without the aid of a single skillful hand, do remarkably well. He knows the value of every tool at his command, and though few in number, as well as crude at best, he makes them serve his purposes with consummate skill.—Ex.

THE PRACTITIONER'S ECONOMIES IN TIME AND EFFORT.—The physician who hopes to accomplish much, who has the ambition to do something more than routine medical work, who wishes to keep abreast of the times, must learn not only to seize the day, but the hour and minute of leisure. The secret of accomplishing much consists in having convenient arrangements for utilizing the scraps of time between professional engagements, and in being able to make light of drudgery. Convenience means the performance of many things; inconvenience, the neglect of necessary tasks. The average man will examine urine if his utensils are in or next to his office, and if he has a sink into which to throw waste. If he must go up or down stairs for his examinations, or to empty bottles, or if he must push aside writing materials to make room for his test tubes, he will avoid analysis of urine as much as possible, and will fail in diagnosis in occasional cases. In writing, a typewriter will be found easier than a pen or pencil. Hour for hour, more can be written, and with less fatigue, in spite of the greater amount accomplished. A roomy and well-arranged desk is a great time-saver. Have a drawer for each line of work that you happen to be engaged in, one for business, one for science, one for correspondence; set aside a space for every important undertaking that will occupy spare moments for more than a few days; in short, have your notes or letters, or whatever your material may be, so that you can pick them up and lay them aside at a moment's notice. Personal comfort is a great factor in increasing one's capacity for work; perhaps it should even be placed before convenient arrangement of materials. Spare your eyes; use a good lamp instead of gas, and make sure of plenty of daylight, not too glaring. Place your furniture so that the light will not be in front of you. All things considered, your private office ought to be the best room in the house, for its purpose. Keep warm, avoid draughts, don't stifle for lack of ventilation in summer. If only one room in your house fulfills these demands, take it for the office. You can put up with imperfect hygiene in the parlor, or even in the dining room, where you will spend only a small part of your time. Have an easy chair, well cushioned, and preferably one that you can adapt to the height of your desk. In general, make your office as pleasant, as convenient, as comfortable as possible. Use your brain to the best advantage, and not too long on any one task. If your professional work for one day has been mostly in the open air, rest yourself by reading or writing, or chemic or microscopic study. If most of your patients have been office cases, and the day is pleasant, refresh yourself by attending to the numerous errands that are always in order. Tax your memory as little as possible with unnecessary details. Keep one of the memorandum blanks which are sent you as an advertisement early in the year, and whenever an engagement is made, jot it down under the proper date. As you pay your life insurance premium, or attend a meeting or deliver a lecture, or

Digitized by Google

discharge any other recurring obligation, enter the next in your list. It will take but a moment to consult your memoranda each morning, and you will be free to forget engagements till the proper time and need not worry about the possibility of mistakes.—American Therapist.

A PROTEST.

A plan has been on foot during the summer to organize a medical college at Dallas, Tex. Some of the leading physicians of that state have protested against this in the form of a circular, and from this we clip the following:

When the question of establishing a school of medicine is discussed, the real honest question is not, will it pay; will it be good for the teachers; will it bring money to their purses, or will it advertise the professors; but, is it best for the community and the profession; will it add usefulness or dignity to the already overcrowded profession? We have already 140,000 to 150,000 doctors in the field, and the diploma mills now grinding day and night, with an annual output of 15,000 to 20,000 more. Isn't it time to pause and reflect? Can there be any earthly excuse for even one more college? Would it not be infinitely better, if we could do so, to shut up and obliterate and abolish from the face of the earth 75% of those colleges already in existence? Is it not a fact that by the multiplicity of medical schools the doors have been thrown wide open to uneducated and unfit men, men unprepared to acquire or successfully pursue a learned profession, taking them from the shop, the field, and the ranch, where they might have been producers of something valuable to themselves and their kind? Who amongst us does not have personal knowledge of those unseemly scrambles for students? The bars must be lowered for their matriculation, and the bars must be lowered for their graduation. So we are forced to the conclusion that the multiplication of medical schools is the largest factor in the deterioration of our profession, in the loss of the dignity, morale, and high tone that once characterized it.

But there are other objections of minor, but still important bearings. In addition to the unseemly scramble for pupils, which affects the country at large, here comes this objectionable feature, especially to the local profession, viz., the keen, still hunt for clinical material. And the preserves of the honest, hard-working non-professor are unscrupulously poached upon in order that the professor may swell and strut and look wise things, if he doesn't say them. Indeed, to such an extent do the private practitioners in some of our larger cities suffer that they are forming protective leagues among themselves to prevent these encroachments. Horrible to relate, many of these alma maters live and thrive and have their being from the blood of their offspring. They covenant and sell and deliver the diplomas, and then straightway, if the new-fledged doctors dare settle under the shadow of their walls, begin to filch their patients. Oh, sweet alma mater! We are glad to say, however, that here and there in our broad land there are noble institutions, amply endowed, surrounded and crowded with clinical material, with high requirements for matriculation and graduation, where the earnest student can get every advantage, and, if he but comply with the requirements, can leave their halls with the assurance to himself and the promise to the people of at least a useful if not brilliant career. It is simply impossible to establish and maintain a school of this grade at Dallas. In the first place, the necessity for the school does not exist. We are in less than a day's ride of fifty schools—in less than forty-eight hours of two hundred more—of all classes and grades—from Cheap Johns up to the highest and noblest institutions that grace and bless any land. Then, again, it is simply idle to claim for Dallas the required clinical material. In the history of all professions there comes a time when the good and true men are expected to stand firm. That time is upon us now. Gentlemen, we are in the midst of battle. We heartily implore you to join us by withholding your countenance and support from the establishment of any new colleges. We would welcome a kind word of approval from medical associations and from private practitioners.

REVOLUTION IN MEDICINE.

Dr. George H. Rice, of Sandoval, Ill., read a paper with the above subject before the Southern Illinois Medical Association at Mount Vernon, May 14. There is nothing like enthusiasm in talking about a good thing, and trying to make people believe as you do. We are afraid, however, that Dr. Rice will have a hard time in making physicians as enthusiastic in their confidence of the utility of viskolein as he himself seems to be. He says:

"For the past five years I have been steadily pursuing a course of study in all forms of fever, until at last I can cry out 'Eureka.' Not to be too boastful, however, I can truly say I am complete master of the situation. I have discovered a chemical compound, composed of the active principles of kola and sulphoborate of zinc carbolized, which is used in a liquid form hypodermically, and internally in powder form, which in twenty-four to sixty hours will break up the worst kind of fever in the following named diseases: Pneumonia, bronchitis, typhoid, diphtheria, septicemia, and all forms of malarial fevers. I have demonstrated same in my own practice for nearly two years, and also have present to-day some of my brother practitioners who will bear me out in my assertions. To-day it is being used throughout the eastern states in the practice of many eminent physicians. I have not had in my own practice, nor have I seen or heard of a single failure of its use in the practice of others, where it was used intelligently. Therefore, while bringing a new remedy before this association for its approval, still it is not unknown to many of you already. It will no doubt strike your mind as something remarkable; well, it is certainly a surprising remedy, and all I can say is to try it in your own practice. You would not do without it, not a single hour. How does it act? In reducing the temperature rapidly and permanently, by the destruction of disease germs, especially of a

Digitized by Google

zymotic origin. I have never had a single bad effect produced, such as is seen by other antipyretics (cyanosis, etc.), no depressing effects whatsoever. Of course, in treating a fever patient, it requires the exercise of judgment, tact, and the proper clinical interpretation of the indication as presented in each case. Tyson has well said 'that each case is a law unto itself,' so that no single plan of treatment dare to be recommended. Only in the general acceptation of the term can it be given, as it must be used the same as any other good therapeutic remedy. You must watch your cases closely, give strychnine, caffeine, nitroglycerin whenever indicated in your individual cases, remembering the characteristics and idiosyncrasies. I always carefully feel my way.

"Will relate a case. Typhoid fever; pulse 120, temperature 104 or higher; tongue dry, brownish fur, cracked fissures; skin hot and dry; low form of delirium, with great restlessness; a don't care sort of feeling. At once I gave hypodermically 10 minims of the liquid added to 10 minims boiled water, used with some good aseptic springe—I use Dr. J. Blake White's, of New York—(right here let me caution you to be very careful in using your syringes that they be thoroughly sterilized before using) after which I begin with the powder and give 10 grains (to an adult) every four hours for the first day. If I get no apparent effect then I use them every two hours, and the injection every twelve hours. Then if I find the temperature is not reducing, I push them both, use the injection every six hours and the powder every hour, for the patient is then able to bear all you wish to give. The temperature will fall and fever disappear.

"I generally continue the powder, about 10 grains, every four hours for the next twenty-four hours. Many times you will find the temperature will be reduced when from one to four powders have been given. Of course, I look after the secretions. If I find constipation I generally give a mild laxative, and I never found anything to equal phosoda; it acts kindly and is cooling to the bowels. I give one or two teaspoonfuls as often as needed. I rarely use any other drug. I oftentimes, however, use cold water applications on the head, wrists, and over the heart, especially if the temperature is very high; invariably I use the sponge bath, it is refreshing and quieting. When the temperature is down to normal, convalescence begins; you must then resort to tonics and other remedies to build your patient up. Occasionally I give at that time strychnine or other good spinal stimulants. I have long since discarded whisky or alcohol in any shape, knowing so well its evil and baneful effects, but if you prefer, use them.

"The above is about the same course I pursue in all forms of fevers of a zymotic nature. I feel my way slowly and carefully always the first day, after which you can judge more clearly what your patient will bear, some more, some less, children always less. I never give less than five grains nor more than twenty grains at a dose. I have often given fifteen grains to begin with. There need be no timidity about using freely after the first twelve to twenty-four hours. I have a reason for believing that fever does not always depend entirely upon local causes. Its features go to show that it is a nervous disorder, acting along the line of the vasomotor system, and that its methods are reflexed, and its results a destructive metabolism, which reveals itself in general emaciation and is most intense at the original seat of morbid irritation. It may be organic or simply in the blood alone. The reduction of fever, besides preventing a loss of power and substance by wasteful molecular action, is directly beneficial in another way. It depletes areas which border on the casual irritant or its habitat, and reacts as a sedative at the source of disease. It is a matter of interest, therefore, to know in what way a fall of temperature can react upon the local processes, which determines the course of fevers. Now, gentlemen, I am already making this paper too long, but trust you will be repaid for your attention and patience. To me this has been a most interesting study for years, and I wondered many times why it was we were so helpless with so many cases of fever, that we must sit by their bedside and see strong, young, able-bodied people go to an early grave.

"I set about years ago to accomplish this result, to be absolute master of fever cases, and I am glad to be able to say I have grandly accomplished my purpose. The process was slow and many times discouraging, but by degrees I perfected the formula. I therefore recommend this remedy to your consideration, study, and use."

MEDICAL SECTARIANISM AND MEDICAL LEGISLATION—A LETTER TO THE GOVERNOR OF MISSOURI.

ST. LOUIS, MO., May 25, 1897.

Hon. Lon V. Stevens, Governor of Missouri—DEAR SIR: Yours of the 22d inst. is received. My idea about appointments on the state board of health, from the standpoint of a chief executive, acting for all the people, would be that all interests should be represented in proper ratio. The preponderating interests should be the majority of the people, through the medical men, who represent them. Every lawfully recognized medical interest should have a place on the board in proportion to ratio of population. The people who employ the regular medical methods of advanced modern medicine being preponderatingly ascendant, should have a majority. Regular modern medicine is in no sense a theoretic school of medicine, nor the "old school," nor allopathic school, as the homeopathists derisively term it. Its votaries administer treatment on the allopathic, contrapathic, homeopathic, or any other principle. It is simply rational medicine founded on observation, experience, and a study of the human machine, and how to regulate it, in health and disease, so as to keep it running best and longest.

A century ago the practice of medicine was as different from the practice to-day as methods of transportation are as compared wtih those of to-day. The regular profession itself was divided between theorists. The theory of Hahnemann was in vogue as

Digitized by Google

that of Paracelsus, a regular physician, only Hahnemann cut away and made an exclusive system of practice and adopted the infinitesimal dosage idea.

Laboratory study and biological investigation, vivisections and animal experimentations, supplanted all the theories with facts of physiologic and chemic research and made a new medicine, and the regular practice is the newest of all schools of medicine, if a practice that accepts everything that cures, unhandicapped by any theory of its action, can be called a school. We ignore the term as a misnomer, as we reject the epithet, allopath, as too restricted and sectarian, as homeopathy is. Scientific investigations, continuous observation, enlightened experience, guide the best minds in regular medicine. It has learned some things that are good from homeopathy and adopted them, and some things that are bad and rejected them. Personal proving without physiology and pathology is fallacious. Medicine is a developing science and its practice an evolution. No broad-minded observer, no matter how he starts or what he professes, if he has a naturally qualified medical mind, can honestly continue through life a sectarian physician—an exclusive pathist of any kind. There is but one place for a physician, and that is unhandicapped and without a sectarian designation, free to choose from all sources in the regular profession.

I do not approve of persecution or censure of the sectarian physician, nor of excluding him from fellowship with regular physicians, if he drops his trade mark, as many do and more are now doing. Men become sectarian physicians as they join churches, because of environment, wife, mother, etc., and when a woman's arms are about a man what can he do?

I hope you will constitute that board as it seems to me you are in duty bound to do, recognizing all interests. It is not with you a question of schools, but one of the people.

I object to the procedure at Fulton, not because the homeopathists should not have a place to be treated in, but because regulars, who represent so large a part of the people, should not be turned out to make a place for them, and because the act is in its nature ex post facto, the patients having been sent there for regular treatment. As a physician I should object to real, honest old-time homeopathy because of its fallacy and inadequacy, not because some superior homeopathic physicians do not show more skill than some inferior regular physicians, for medical practice is much in the man and his personal judgment.

Before you finally act on this subject I hope you will fully inform yourself as to the status of this sect with reference to onward-marching modern medicine that has done in the last third of a century and is now doing so much for mankind, and not be influenced by the stale old cries of old school, nauseous drugs, allopath, etc., against the most advanced of all scientific pursuits of our day. Modern hygiene, neurology, bacteriology, quarantine, the study of the causes and prevention of disease, antiseptic surgery, etc., all belong to regular medicine. All that homeopathy accedes to or uses is taken from the work of our laboratories, clinicians, and savants. While a sect in medicine or religion should be recognized by the state, it should not be placed in a position to dominate the non-sectarian.

On reflection, I think it would be an unjust stab at the large college interest in the state, and at the honor of college men, not to allow it representation on the board. It strikes me that one or two fair-minded men might be selected from all interests involved. I think the college men know best what the schools want, and if no college should have a majority fairness in action would be assured. Regular medicine is undoubtedly entitled to larger and permanent representation, not alone because it is now the newest, most advanced, and most liberal school (if you insist on the term), and the most truly eclectic, for it gathers freely from every source that may enlighten or cure, but from a sound political standpoint, viz., it represents the greater number of the body politic. More of the people prefer it and employ regular physicians than the sects in medicine, and hence, as their chief executive representative, you are in duty bound to regard their wishes and interests. You are the people's spokesman and servant in the premises.

Yours very truly, C. H. HUGHES, M. D.

Correspondence.

TO PREPARE ASEPTIC AND ANTISEPTIC CATGUT.

While there is nothing new in the various factors taken separately, I claim originality for the combination of the several steps and the simplification of the method to be described.

Select a good quality of commercial gut and place it for twenty-four hours in ether; remove from ether and wash in alcohol, and after winding upon glass spools put it for twenty-four hours into the following combination:

Potass. bichromate . . .	gr. j.
Formaldehyde	*m* x.
Water	℥ j.

After removing from this solution, store it in a 1-1000 alcoholic solution of pyoktanin. This produces a gut absolutely aseptic, antiseptic, and non-absorbable for from ten to forty days, while the tensile strength is not impaired.

I have used this gut in practical and experimental work, and have never had cause for regret. Just before using, the spools of gut should be rinsed in sterilized water, as the excess of pyoktanin will stain the fingers and tissues. W. D. JONES.

Rising City, Neb., September, 1897.

MEETING OF THE BRITISH MEDICAL ASSOCIATION—DISCUSSION ON APPENDICITIS.

MONTREAL, September 2, 1897.

Editor Western Medical Review: Knowing that you would be pleased to receive news from the British Medical Association, I write a line while waiting for the regular work in the different sections to begin.

Digitized by Google

There are about two hundred doctors here who have registered from the states, and seven hundred members. The attendance from Nebraska is limited to three, i. e., Drs. J. J. Cameron, H. B. Lowry, and myself. Special seats are reserved for delegates and every effort made to bid us welcome. We have an excellent opportunity to become acquainted with and to study the individuality of the great medical men of Great Britain and this country. At a dinner given at the Windsor Hotel in honor of Lord Lister an address was presented to the famous physician.

The regular work in the different sections began yesterday morning. I attended the surgical section and was pleased to note that the president, Dr. Christopher Heath, of London, extended a most cordial invitation to delegates present from the States to freely express their views and methods of operating. The paper read by Dr. G. E. Armstrong, of Montreal, on the surgical treatment of appendicitis, elicited a lively discussion. The consensus of opinion seemed to be that all secondary cases should be operated upon. In acute cases there was a decided difference of opinion as to the best line of treatment to adopt. Dr. Armstrong advised immediate operation in all cases. He employed three large-sized glass drainage tubes, placed low in the pelvis and on either side. The author of the paper was of the opinion that appendicitis was due usually to an abrasion or injury caused by fecal matter to the mucous lining of the appendix, which afterwards became ulcerated. The discussion was opened by Dr. J. Ward Cousins, of Southsea. Early operation in all cases was his practice. He considered the point of induration of no special significance in locating the position of the appendix. As retractors he used four strong silk ligatures, two on each side of incision, which prevented the bruising of the parts. Flat sponges were employed in walling off the abdominal cavity instead of gauze. Mr. Jordan Lloyd, of Birmingham, did not favor the use of glass drainage tubes, but preferred iodoform gauze. He considered the point of induration a sure indication of the location of the appendix. In explanation, he stated that the appendix varied greatly in length and position. The point of rupture was almost always found located near the end, and the position of the extremity, whether resting high under the liver, low in the pelvis, far around to the right side, or near the median line, indicated the point of induration. Dr. Gordon, of Boston, emphasized the use of salines in all acute cases. If unable to retain by stomach, administer saturated solution of magnesia sulphate per rectum. Pain is relieved as soon as free action of the bowels is secured. Never gives opium. "Better let patient suffer agonies of death than to let him die." Opium was strongly condemned by all the speakers. Nine-tenths of Dr. Gordon's cases recovered without operation. He never operates, during an attack, without first making thorough trial with the salines. After recovery from acute symptoms operation in all cases is advised. Dr. Ferguson, of Chicago, operates in all acute uncomplicated cases. Dr. Vanderveer, of Albany, thought that many deaths were due to delay in operating, and that the physician and surgeon were too widely separated. They should get closer and work hand in hand. Early consultations and the more closely they worked the better it was for the patient. Dr. Heath advised the more general use of salines. He considered many lives were sacrificed by too early operations. Advised use of poultices to relieve pain. Dr. C. B. Ball, of Dublin, urged operation as soon as the diagnosis had been made. Hon. Sir William Hingston, of Montreal, operated on about one in ten of his cases. He strongly condemned indiscriminate operating. Dr. Armstrong, in closing discussion, defended the use of glass drainage tubes, claiming that gauze would not drain pus. He has frequently found upon removal of gauze drains the bottom of the wound covered with pus. The gauze will drain serum, but not pus.

I must close, as it is time for the morning session to open.

Yours very truly, F. D. HALDEMAN.

SHALL WE LET DOWN THE BARS?

Editor Western Medical Review: The Association of Medical Colleges at its last meeting, held in Philadelphia in June, passed a resolution to the effect that graduates and students of homeopathic and eclectic medical colleges should be given credit for their time on the four-years course. That such action was wise cannot be denied for an instant, and, if I am not mistaken, it will result in many students changing to the regular school after starting in one of the others. In the past, a student who has been spending his time at one of the sectarian colleges would be compelled to lose that time if he should desire to enter and graduate from a regular school.

The majority of students who enter a homeopathic or eclectic college do so from force of circumstances, many from having become acquainted with and taking a liking to a certain physician of the particular school he finally enters. After awhile, when he has put in one, two, or possibly three years, and has thought the matter out for himself, he begins to see that he has made a mistake. But if he inquired into the matter he would find that if he attempted to change he would have to sacrifice considerable time and money, both of which he could ill afford to lose. He would know that the anatomy, physiology, surgery to a great extent, chemistry, and in fact nearly everything except materia medica and therapeutics, was the same in one school as in the other. And in thinking over these things he would be impressed with the fact that the dominant school was too illiberal, and he would be driven from it to the other and would be a homeopath or eclectic for life. This the writer knows to be a fact. It is not a theory, and I believe that time will show that the action of the Association of Medical Colleges in passing the above resolution will be the means of breaking down one of the barriers between rational and sectarian medicine.

The time is probably not ripe yet, but it is not far off, when another barrier will be broken down that is keeping many a physician in the sectarian ranks who

Digitized by Google

would gladly leave them if he could. That barrier is the one which our societies have the power to remove. A physician, educated in a legally chartered college, and recognized as a physician by the laws of the land, is refused admittance to our societies because he was educated at a homeopathic or eclectic school. It does not matter if he does renounce his sectarian beliefs, if he does practice rational medicine, or "allopathy," as the sectarians persist in calling it, he cannot be given the right hand of fellowship, just because he has no regular diploma. When one stops to consider the sacrifice in time and money that will have to be made by a physician in active practice to go and get this diploma, it needs not to be wondered at that he prefers to keep on practicing under the title of "irregular." I would not for a moment think of advising the admission of homeopaths or eclectics to our societies. Far from it. Oil and water would mix just as well as a discussion on medical matters in a mixed society. Such a proposition is absurd. But I do think, nay, I know, that if our societies would say to these sectarians, "Renounce your sectarian beliefs, discard your ism from your practice, and we will accept you as members," that some would gladly do so and join the ranks of scientific rational medicine. Just so long as we do not do this, these liberal educated men—for it is the liberal educated men that we would get—will naturally be against us, for the simple reason that we will not let them be for us. A resolution has been before the Nebraska State Medical Society two or three times with this object in view, but each time it was voted down without discussion, for the reason that it was likely to create trouble. And possibly as long as the code of the American Medical Association is as it is to-day, it ought not to be considered in our state society, which affiliates with the A. M. A.

But other societies can take this matter up. At the last meeting of the Medical Society of the Missouri Valley a physician's name was proposed for membership in that society who, if I mistake not, was associated with a member in practice. He was, however, a graduate of an eclectic college. Those who knew him spoke very highly of him, both as a physician and as a gentleman. He had been practicing regular medicine for some time, and there was every reason to believe that he was well educated. But the by-laws of the society were against his admittance and he was, in action at least, politely told that he was not good enough to associate with those who belonged to the society. I would ask, Mr. Editor, if it is not time that we stop talking about the narrowness of other schools and broaden out ourselves a little?

I enclose my card and subscribe myself.

Respectfully yours, "REGULAR."

PATRONIZE home industry and subscribe for the WESTERN MEDICAL REVIEW. It is a little trouble to write the letter and put a dollar bill in it, we know, but then the labor will be well rewarded before the year is up.

Society Proceedings.

THERE ought to be a medical society in every county in the state. Physicians meeting together every little while will make this or that one realize that the other fellow is not half as mean as he was thought to have been, when he is seen at close range and when his acquaintance is made. It will remove petty jealousies to say "How do you do?" once in a while. County societies do very well as post-graduate schools, and help one to "brush up" and keep up with the times, if they are run as they ought to be. If there were a county medical society in every county in the state, with live, active officers, the influence of the profession would be far greater than it is at present. By the way! Is there a medical society in your county? If not, why not? Suppose you talk to some of the other members of the profession in your county and see if you cannot organize one.

THE Gage County Medical Society will meet at the office of Dr. J. L. Gumiar, Wymore, October 4.

THE Iowa Association of Railway Surgeons will hold its annual meeting at Des Moines, October 13 and 14.

THE Medical Society of the Missouri Valley meets at Council Bluffs, Thursday, September 16. A larger number of papers is promised than usual, and a profitable meeting is anticipated.

AMERICAN ACADEMY OF RAILWAY SURGEONS.

The next meeting of the American Academy of Railway Surgeons will be held at the Auditorium, in Chicago, October 6, 7, and 8. An elaborate and interesting program is being prepared, and it is expected that this will be much the best meeting ever held by the academy.

THE fall meeting of the Elkhorn Valley Medical Society will be held at the Oxnard Hotel, Norfolk, Neb., Tuesday, October 5, next. Among the papers so far offered are the following titles: "The Treatment of Abortion," "Septicemia Following Abortion," "Aseptic and Elective Obstetrics," "Ruptured Tubal Pregnancy," "A Case of Chronic Glanders," "A Rare Fetal Monstrosity." F. A. LONG, Secretary.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Meeting at Louisville, October 5, 6, 7, and 8, 1897. The executive committee met recently at Louisville, in conjunction with the local committee of arrangements, the following being present: Drs. Stucky, Grant, Mathews, Love, Holloway, and Reynolds. It was determined to make the coming meeting the largest and best in the history of the association, and everything points to a fulfillment of this endeavor.

Digitized by Google

The railroads will make a round-trip rate of one and a third fare, or probably one fare.

The address on surgery will be delivered by Dr. J. B. Murphy, Chicago; the address on medicine by Dr. John V. Shoemaker, Philadelphia. Titles of papers should be sent to Dr. H. W. Loeb, secretary, St. Louis, Missouri.

FILLMORE COUNTY MEDICAL SOCIETY.

The Fillmore County Medical Society will meet at Geneva, September 28, and every second month afterwards. This is one of the newer societies of the state, but brags of having all the physicians of the county, except two, as members. To make up for these two they have three from the adjoining county. Dr. A. G. McGrew, of Geneva, is president; Dr. Royal Woods, of Shickley, is vice president; Dr. J. W. Thomson, of Strang, treasurer, and Dr. Flora M. Barnett, of Geneva, secretary. Drs. George Mozee, Geneva, M. Probst, Geneva, and J. W. Archard, Grafton, is the committee on program. Drs. J. N. Plumb, Fairmont, B. B. Mozee, Geneva, and J. N. Patterson, Ohiowa, is the committee on grievances. Drs. Royal Woods, Shickley, J. L. Brown, Ohiowa, and T. C. Canine, Geneva, is the committee on credentials.

THE American Pediatric Society is making a collective investigation of infantile scurvy as occurring in North America, and earnestly requests the cooperation of physicians, through their sending of reports of cases, whether these have already been published or not. No case will be used in such a way as to interfere with its subsequent publication by the observer. Blanks containing questions to be filled out will be furnished on application to any one of the committee. A final printed report of the investigation will be sent to those furnishing cases. (Signed) J. P. Crozer Griffith, M. D., chairman, 123 South Eighteenth Street, Philadelphia; William D. Booker, M. D., 853 Park Avenue, Baltimore; Charles G. Jennings, M. D., 457 Jefferson Avenue, Detroit; Augustus Caille, M. D., 753 Madison Avenue, New York City; J. Lovett Morse, M. D., 317 Marlboro Street, Boston, Committee.

Book Notices.

The American Text-Book of Operative Dentistry. In contributions by eminent American authorities, edited by Edward C. Kirk, D. D. S., professor of clinical dentistry, University of Pennsylvania, department of dentistry. In one very handsome octavo volume of 699 pages, with 751 engravings. Cloth, $5,50; leather, $6.50; net. Lea Brothers & Co., publishers, Philadelphia and New York.

In the good old days the family physician was the only dentist that was known. If there were any teeth to be "pulled," the doctor had to pull them. Such a new-fangled idea as trying to save a tooth by having it filled,—or "stopped," as our English friends say,—was not thought of. But things are different now. True, the country practitioner has to use the forceps in some localities, and even the city doctor has a chance at it once in a while. But dentistry has come in as a new profession, and the advances that have been made during the last ten or fifteen years speak well for those who make up the membership of that profession. But while the physician does not have to do the dentistry of his families, he is very often called upon to give his advice as to what should or should not be done with an obstreperous set of teeth. When the dentist has given his opinion as to what ought to be done, the family physician is often referred to as to the wisdom of the dentist's advice. For this reason, if for no other, the physician finds that it is his duty to keep up with the progress in dentistry, as well as with several other side issues that do not really belong to medicine. The American Text-Book of Operative Dentistry is not gotten up for the family physician, but nevertheless he will find in it all the information he will need to be up with the times.

No department of surgery has shown the wonderful advancement during the last few years as has dental surgery, and this volume brings this department of knowledge up to date in all its branches. To present it completely in its ripest modern development is beyond the power of any one mind, hence the wisdom and necessity of invoking the knowledge possessed by recognized authorities in the various departments. The editor of this work is well known among dentists as the editor of Dental Cosmos, and as a writer of authority on dental matters. With him are associated as writers for the volume some of the best men in the dental profession in the east, such as R. R. Andrews, of Cambridge, Mass.; Henry D. Burchard, Philadelphia; Calvin S. Chase, Chicago; W. E. Christensen, Philadelphia; D. M. Clapp, Boston; M. H. Cryer, Philadelphia; Edwin T. Darby, Philadelphia; C. L. Goddard, San Francisco, and others of equal note.

The work is essentially a new departure; old traditions have been subjected to critical study and rejected when found obsolete, or restated when their value was evident. The plan followed has resulted in a practical exposition of all that may be fairly included under the title, so arranged and presented as to meet the requirements of those for whom it was written. The statements made are either those of verified fact or are based on deductions warranted by existing knowledge. Ample use has been made of pictures, the series including no less than 750 engravings illustrative of the present status of the science and art of operative dentistry.

There are three principal divisions: (1) Dental anatomy; (2) operative dentistry; (3) dental orthopedia, the last including the modification of facial contours, in which there are such large possibilities for the application of esthetic talent and mechanical skill, as outlined by the originator of this art, Dr. Case.

The work is magnificently illustrated, and while many of the cuts used have appeared before, it does not detract from their value. To sum up, the work is one that should be, and will be, in the possession of every progressive dentist in the country, and physicians will find it a very valuable addition to their library. The publishers have done their part in their usual excellent manner.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL. II. No. 10. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. OCTOBER 15, 1897.

Original Articles.

OPERATION FOR ULCUS VENTRICULI CHRONICUM—THREE CASES, WITH REMARKS ON INDICATIONS FOR OPERATION.*

BY A. F. JONAS, M. D.,

OMAHA, NEB.,

PROFESSOR OF SURGERY, OMAHA MEDICAL COLLEGE.

The activity of the medical and surgical investigations in the last decade is something that no man could have foretold even a half century ago. One field after another has been opened, and each has immediately been occupied with numberless, tireless, and painstaking laborers, whose chief aim has been to learn the truth. The sum total of the work done can never be computed, each worker seeking to establish incontrovertible facts that in the end shall benefit mankind. The same lines have been traversed countless numbers of times to clear up errors, so that our knowledge may become exact. In no field is this more true than in gastric disorders. The physiologic data of the gastro-intestinal tract is immense, yet far from complete; still enough has been accumulated upon which to build an advanced pathology, symptomatology, and a more exact therapy. When we stop to consider what the human animal (often worse than animal) daily puts into his stomach, it is easy to understand the difficulties the diagnostician and therapeutist has to encounter.

From the long list of digestive disorders, permit me to select for discussion one that is relatively rare, yet sufficiently common to demand our most serious consideration. Ulcer of the stomach is relatively common, and in the vast majority of cases recovers so promptly after proper treatment that some of us have been led to look upon it as not a serious condition. Leube, out of 556 cases treated by him during a long series of years, lost 12, a mortality of a little more than 2 per cent.; 8 per cent. of hemorrhage; 1.2 per cent. of perforative peritonitis. Of these, 196 were men and 360 women, twice as many women as men. Of his 556 cases, 74 per cent. recovered; 22 per cent. improved; 1.6 per cent. unimproved. His treatment consisted of ten days' absolute rest in bed, cataplasma and Priessnitz applications, Carlsbad water (¼-l), graduated milk diet. Average time of recovery, four to five weeks. No medicine except occasionally soda bicarb. No morphia. For constipation, rhubarb, soda, sulphate and bicarb. Three-fourths of his cases recovered permanently. Of the remainder, recurrences were observed. About 4 per cent. were subjected to surgical interference.

It is this latter group, chronic ulceration of the stomach, that we wish more especially to discuss today, and for this purpose three cases shall serve as a basis for a few comments. In order to avoid tedious repetition, the first two will be briefly gone over, and the third one at considerable length, because of some unusual features. The methods of examination and operation were substantially the same in all.

CASE I.—F. G., aged 31; laborer. Had indigestion nearly four years; during the last year had repeated attacks of hematemesis; much gastric pain, often intense; indigestion becoming continually worse; obstinate constipation; occasional vomiting; loss of weight; very anemic. Stomach enlarged, displaced downwards; splashing sound distinct; peristaltic wave sometimes discernible. Diagnosis—Ischochymia, pyloric stenosis, chronic gastric ulceration. Operation recommended and agreed to. Median incision; found pyloric stenosis. Mikulicz-Heinecke pyloroplasty was done. Ulcer was found in the line of pyloric incision, which was excised. Operation completed. Recovery uneventful.

CASE II.—Miss N., aged 21; servant; gastric disturbance three years. During the eight months preceding admission had several attacks of hematemesis. On admission was very anemic, poorly nourished. Every form of food caused distress and pain. Stomach enlarged, lower margin below the umbilicus, tenderness below right costal arch; constipated. Tried Leube's treatment without effect. Diagnosis—Ischochymia, pyloric stenosis, chronic gastric ulceration. Recommended operation, and agreed to. Mikulicz-Heineke operation was carried out. Recovery.

The following case we will examine more in detail.

CASE III.—C. H., married, German; age 32; butcher.

History.—Has four sisters and six brothers. Father died of stomach trouble of fifteen years' duration. Oldest brother complains of gastric disturbance, other brothers and sisters well. His present illness began fifteen years ago, when he suffered from "cramps" of the stomach. These attacks recurred at irregular intervals, most frequent in summer, and were of short duration. Six years ago began to have fetid eructations. Up to this time he had used considerable beer and wine, which he was disobliged to discontinue on account of the pain and "cramps" produced. These were usually relieved by emesis. About three and a half years ago began vomiting small quantities of blood, which from time to time increased in amount. Potatoes, bread, and meat always produced "cramps." During the last year emesis was not so frequent, but

*Read before the Medical Society of the Missouri Valley, at Council Bluffs, Ia., September 16, 1897.

Digitized by Google

much larger in quantity, and consisted largely of blood. His diet recently was composed of milk, soup, sago, soft eggs, fish, beef tea, etc. Butter and milk was most easily borne. Constipation severe, requiring enormous doses of cathartics to relieve. Has been unable to work for more than two years. Could only lie on his left side during the last four years. Pain under right costal arch constant, but much more severe during the night. During the last five months has been almost constantly in bed.

Status præsens.—We find patient pale, anemic; weight about 130 pounds (weight in health was 200 pounds); musculature soft, flabby; he has a pinched expression of countenance. He is reclining on a couch nearly in a sitting posture. Pulse, small, rapid; tongue, pale, with sharp impression of teeth, coated at the base; fetid breath. Patient placed in a horizontal position. On inspection, abdomen rather full, with greatest prominence about the umbilicus and a marked depression at the epigastrium. Peristaltic waves very marked. On palpation, find a painful, rather resistant, thickening below the right costal arch. Some tenderness about the umbilicus. On succussion, splashing very distinct under and to either side of umbilicus. Slight tapping on left side of umbilicus excites gastric peristalsis, which rapidly increases, producing pain and causing the patient to resume sitting posture. He says that a horizontal position always causes severe pain, frequently requiring a grain of morphia hypodermically to relieve. While in semi-reclining position a dull line, extending from right to left and below the umbilicus, can be made out on percussion, which is supposed to mark the lower border of the stomach. Bowels are obstinately constipated; urine very much reduced in quantity. All other organs seem normal. A cathartic, followed by an enema, is ordered in order that the bowels may be empty the following day for further examination.

The following day, catharsis having been free, the outline of the stomach can be easily traced, and seems greatly distended with gas and fluid. The contents are removed with a tube, and found to be nearly two quarts in quantity, is of a dark brown appearance, with coffee-ground-like sediment, containing undigested curdled milk, coagulated white of eggs, which had been taken the night before. It has a fetid, distinctly sour odor. The abdomen is now flat, and the spinal vertebræ and aorta easily felt. The stomach is now filled with atmospheric air, introduced with a bulb syringe and stomach tube, when its outlines can be distinctly made out, and seem to fill nearly one-third of the abdominal cavity, its greater curvature filling the left hypochondrium, extending downwards nearly a hand's breadth below and to the right of the umbilicus. The pylorus could be felt as an indurated mass. Subsequently the stomach was distended several times with bicarbonic acid gas by giving bicarb. soda and taratric acid.

The stomach contents were filtered and exhibited a slight reaction to Gunsberg reaction for free hydrochloric acid and freely to Uffelman's test for lactic acid. Microscopically, sarcinæ, scattering leucocytes, occasional red blood corpuscles, and a large quantity of debris, evidently disorganized blood elements, showing that bleeding is still continuing.

Diagnosis.—Ischochymia. Hemorrhage, due to chronic ulceration, located near or at the pyloric end. Non-malignant pyloric stenosis. Gastro- and enteroptosis.

After repeated examinations and observations over a period of about three weeks, operation was recommended and gladly agreed to by the patient and friends. Three days previous to operation he was kept absolutely at rest in bed. Feeding by nutritive enemata. Nothing but carbonated water per os. Stomach lavage daily. Strychnia hypodermically. On the morning of operation stomach carefully washed out and siphoned until the water returned clear. The patient was then placed on the table. The outlines of the stomach had disappeared.

Operation.—Chloroform anesthesia. After the usual preparation of the field of operation, the stomach was exposed by a median incision. The organ was completely empty, and had contracted to nearly its normal size, but occupied a position with its lower border on a line with the umbilicus. Palpation revealed nothing unusual except that the pylorus appeared very much thickened. An attempt was made to lift it out of the abdomen, which was not successful. An incision one inch in length parallel with the long axis of the pylorus near the stomach was made. An exploration revealed the pyloric lumen to be pervious for an ordinary lead pencil. The incision was now extended to two and one-half inches, laying the contracted lumen entirely open. The pyloric wall was five-eighths of an inch in thickness. The extreme ends of the incision were brought together with a silk suture, and the wound closed in such a manner that the line of sutures was transverse to the pyloric axis, according to the method of Mikulicz-Heineke. During the suturing leakage occurred, necessitating gauze drain. The abdominal incision was closed; hygroscopic dressing applied. After recovery from anesthesia, rectal feeding and strychnia gr. 1-30 was resumed, carbonated water per os after twenty-four hours. The case looked promising, with good pulse and no temperature for three days. On the night of the fourth day he became restless, and died very suddenly.

Post mortem.—The stomach was enormously distended, and contained nearly a gallon of bloody fluid, with a large quantity of coffee-ground material. The organ filled the epigastrium, left hypochondrium, and extended downward to a point midway between umbilicus and pubes. Our line of sutures was perfect. The pylorus patent to two fingers. After repeated examinations, after the removal of the stomach, we found a very large number of very small ulcers, occupying its hepatic end and innumerable little cicatrices, the former seat of ulcers. The pylorus was occupied with a dozen or more larger scars, and its wall was thickened with a mass of new formed connective tissue, but no recent ulcerations. All other

Digitized by Google

organs seemed normal. Immediate cause of death, renewed hemorrhage from the innumerable ulcerations.

The discussion of the etiology and pathology of gastric ulceration is extremely interesting, but would take us far beyond the time allotted for the reading of papers, and I hope some future occasion may give us opportunity to take up this fascinating topic. For the present we will content ourselves with the more practical question, the indication and methods of operation.

To attempt to draw conclusions from one or three cases would be presumptuous. They would be of little value because no two cases are quite alike. Therefore we will be better aided by studying the work of those of large experience; for example, the experience of Leube from a medical standpoint, and Mikulicz from a surgical standpoint, men who count their cases by the dozens and hundreds.

As an indication for operation, Leube recommends:

1. Stomach bleeding gives in part a relative and in part an absolute indication for operation.

a. The least prospects for cure by internal treatment, according to Leube's experience, are such cases where there is no profuse bleeding, but repeated moderate hemorrhages. Such patients succumb sooner or later, and in such cases operation is absolutely indicated.

b. If, in the course of the disease, a profuse hemorrhage occurs, an operation is indicated, and is not absolute, but relative. The general condition must be considered to aid us in arriving at a conclusion.

If one is driven to operation on account of rapid uncontrollable bleeding that threatens life, due to erosion of an important artery, it is of utmost importance to find the seat of the ulcer and the bleeding point. But, according to Leube, this seldom is possible. Yet it would seem as if an attempt would be justifiable.

2. As a second indication for operation, especially for gastroenterostomy, are cases of ulcer where there are uncontrollable and severe attacks of recurring intense pain and vomiting, which are often regarded as pyloric spasm, and threaten death by inanition.

3. A third indication is when there is perigastritis, adhesion of stomach to neighboring organs, and other consequences of cicatrization and ulceration. These conditions are difficult to diagnose, and our actions can only rest on probabilities.

4. A fourth indication for surgical interference in gastric ulcer is perforation into the free peritoneal cavity. In the presence of such a perforation the only possible escape from death is when the stomach is empty. In all other cases only operation can save life, and it should be done with all possible haste. Leube states that nothing can be expected from surgery if the operation is not done in ten hours after perforation, and even then, according to present statistics, 75 per cent. end fatally. A mortality which I am sure, with improved diagnostics and better surgical technique, will be very much reduced.

Having decided on operative procedure, the next problem is, what shall we do in such cases? Experience has taught that one of three operations can be carried out in nearly all the cases, viz., pyloroplasty; pylorectomy, and partial resection of the gastric wall, or excision of well-defined ulcers; gastroenterostomy, with modifications according to each given case. Loreta's method of divulsion is an operation of the past on account of the tendencies of recurrences. Likewise the so-called gastroplicátio, according to Bircher, has not given the results that were expected of it. No man has had more experience in this line of work than Mikulicz. Permit me to refer to his recent publications on this subject. Pylorectomy in ulcus ventriculi is abandoned more and more because it is of the three aforesaid operations the most dangerous, and gives without doubt the least guarantee of radical cure. But he admits that in some cases it is the only procedure. If there is the least suspicion of beginning cancer, nothing but circular resection should be done.

Whether we shall do pyloroplasty or gastroenterostomy is still an open question. Both appear with equal facility to accomplish the desired purpose, that of the emptying the stomach contents into the intestine. If this is true, then our choice of operation must be on technical grounds. If we consider which operation is least dangerous and easier, then pyloroplasty seems to have the preference. Pyloroplasty, however, is not indicated in all cases, and a certain number are best managed by gastroenterostomy. Pyloroplasty can only be easily done when the pylorus is movable and its walls are pliable. Firm adhesions to the anterior abdominal wall, liver, and pancreas contraindicate operation. In regard to the technique of pyloroplasty, it must be insisted that the pyloric orifice should be enlarged to its greatest possible extent, especially if a recent ulcer exists in the pyloric region.

Pyloroplasty has been termed the normal operation for the cure of ulcus ventriculi, because it re-establishes the normal conditions more perfectly than any other. Any form of gastroenterostomy must of necessity exclude a portion of the intestinal tract, and in so far modifies the digestive function. Again, many complications may arise, especially spur formation at the point of union, after the latter operation, that interferes with the proper emptying of the stomach. Mikulicz recommends, where we have to choose, in gastric ulcer, between pyloroplasty and gastroenterostomy, to employ the first, providing there are no technical difficulties. Only where pyloroplasty cannot be done has gastroenterostomy a place; and if the latter is done, enteroanastomosis should be combined according to Braun-Jabouly. Partial resection or excision of ulcers, providing they can be with certainty felt through the gastric wall, or through an exploratory incision, is justifiable and should always be done.

Strong coffee, improper food, poor ventilation, fashionable clothing, corsets, the hot air furnace, the sewing machine, the worry, fret, and ambitions of modern "society," have ruined the health and happiness of nineteen out of twenty of our American women.

Digitized by Google

THE INJECTION METHOD OF TREATING INTERNAL HEMORRHOIDS.*

By RUFUS D. MASON, M. D.,

MISSOURI VALLEY, IA.,

LECTURER ON RECTAL DISEASES IN CREIGHTON MEDICAL COLLEGE, OMAHA, NEB.

The injection method of treating internal hemorrhoids, which consists in forcing a solution of carbolic acid into each tumor, was devised by a young physician by the name of Mitchell, of Jacksonville, Ill., in 1871. From that time until 1888 the method was not much known or used by the medical profession, but was in the hands of traveling doctors, many of whom were almost entirely ignorant of the principles of surgery. In 1888 Dr. Edmund Andrews published his work on rectal diseases and fully exposed Mitchell's methods of treatment. Since that time the medical profession has been somewhat divided as regards the value of treating hemorrhoids in this way. Agnew, of San Francisco, is probably the strongest advocate of this method among those recognized as authority on rectal diseases. Kelsey, Matthews, Allingham, Gant, Bacon, and in fact nearly all the men whom we look upon as leaders in this class of diseases are opposed to the method. Kelsey, of New York, was one of the first to investigate this method, and in 1885, before Andrews' book came out, he published an article in the New York Medical Journal in which he spoke very favorably of it, but in his later writings he seems to have very materially modified his opinion in regard to the matter. In his book on diseases of the rectum and pelvis, just published, he writes as follows: "The fact that since then I have had a succession of bad and troublesome cases treated by this means, and that these cases have led me in a measure to be less hopeful of the results of the method, in no way invalidates the reports of my own carefully observed cases up to that time. In writing now I shall use less glowing terms than I did then, but I have by no means abandoned the practice. It is still to my mind a very good way to treat a great many cases, having in certain points exceptional advantages over all others. * * * All that can be said of my own practice is, that while for a year or more I used it almost exclusively and was much pleased with the result, a succession of bad cases led me to modify my views of its applicability, and that though I now use it constantly it is only in selected cases." In my opinion the words "selected cases," as used by Kelsey, cover the whole ground. I have used the injection method in a good many cases during the past few years, and I believe that if it is judiciously used in properly selected cases by a person well qualified to do such work it will give good satisfaction, while if used in cases not adapted to the method the most unpleasant and unexpected results are apt to occur. I will endeavor to explain what I mean by selected cases.

Patients suffering from internal hemorrhoids do not as a rule consult a physician until after the tumors have been formed for some time. They may have existed for a long time before their presence is known by the patient; but after an unusual amount of exertion, or a protracted period of constipation, or too liberal indulgence in food or spirituous beverages, they suddenly begin to protrude at stool. Now when this occurs they will nearly always be highly irritated and in a badly inflamed condition. Should the sufferer come to you in this condition he will not be a suitable subject for the injection plan of treatment. But most of these cases buy some patent medicine to use until the acute exacerbation is over and then go along pretty comfortably until another one occurs, and each attack proves a little worse than the one which preceded it, until the tumors get so they protrude at each stool. They generally remain more or less irritated and sore, with the sphincter muscle highly sensitive. But occasionally in a case of long standing they will lose their soreness, and the constant friction and congestion will induce an induration of the tumor wall, with a plastic exudation of the connective tissue between the different coats of the bowel, and a somewhat hard, semi-fibrous, painless tumor is the result. The constant protrusion of these tumors causes the sphincter muscle to lose, to a considerable degree, its contractile power and they protrude very easily. The sphincter also loses its sensitiveness and tendency to spasmodic contraction which is so painful. In many of these cases the tumors are outside of the body most of the time. These are the cases that are adapted to the injection plan of treatment. I wish to relate two typical cases which will illustrate what I have endeavored to make plain and explain my understanding of a case properly selected for injection treatment.

CASE I.—Mr. H., a farmer, age about 50, had been a sufferer from internal hemorrhoids for several years. He had used about all the patent remedies that he had seen advertised, and nearly everything that his friends had recommended, with negative results. When he came to me he easily forced into view several large, solid, painless tumors, such as I have just described. The sphincter muscle was greatly relaxed and the tumors were out most of the time. I injected the largest tumor and also one small one with a 50 per cent. solution of carbolic acid and returned them into the bowel. No pain was complained of and I could hardly make the old gentleman believe that I had done anything. In about three weeks after the first operation I injected the remaining tumors with the same result. Those tumors have never been seen or heard of since, and nearly two years have passed since the operation. There was no pain or inconvenience of any kind, neither was the patient hindered in the least from attending to his usual work about the farm. This is a typical case for the injection plan and the most happy results were obtained, but such cases are not of the class most often seen; in fact, they are quite rare. I will now describe a case which is a type of those most often met with in practice.

CASE II.—Mr. W., also a farmer, age about 35, a neighbor of Mr. H. Hearing how easily Mr. H. was

* Read before the Medical Society of the Missouri Valley, Council Bluffs, Ia., September 16, 1897.

Digitized by Google

cured he came to me, and upon examination I found several highly sensitive tumors grasped in an irritated sphincter that was greatly given to painful spasmodic action. He would not hear of any other treatment than that of injection, as had been done upon his neighbor. I explained to him that the cases were not the same and that the operation in his case would be very painful, but it was injection or nothing with him, and so, much against my own judgment, I operated by the injection method. I injected two medium sized tumors the first time and intended operating upon the remainder at another time. He still has the other ones, as I never got a chance at them. In a few hours after the operation he began to have pain, and it increased until it was terribly severe and required large doses of morphine. This pain was so severe that he was confined to his bed for two weeks and he did not get over it for nearly six weeks. Strange to say, he is satisfied and says he would come back for more treatment if he needed it, but the remaining tumors do not protrude and he thinks he is cured. He suffered very much more than he would have done under an operation where the ligature or clamp and cautery were used, and then he is only partly cured. I used the greatest care in injecting the fluid, and am sure none of it went into the connective tissue under the tumors, as is sometimes the case. This is only a fair sample of the cases met with in practice and they are not suited for the injection method of treatment.

A case occurred in the practice of a physician of my acquaintance in which the inflammatory action was so great following the injection of a large hemorrhoid that the patient was confined to his bed for several days with his anal region packed in ice, while frequent and heroic doses of morphine were administered for the relief of pain. It is needless to say that both physician and patient were disgusted.

Having, then, concluded to operate by this method and a suitable case being at hand, how shall it be done? My plan is as follows, being varied somewhat in individual cases: If the bowels are not constipated and are acting well, I do not, as a rule, disturb them. If, on the other hand, there is constipation, with hard, dry stools, a brisk purgative should be given the second evening before the operation and a pill or two of aloin strych. et belladona the evening before. A large hot enema should be given at least an hour before the operation, flushing the entire colon if possible. Just before operating another small enema will have to be given to bring the tumors into view, instructing the patient to strain down as hard as possible, so as to bring the tumors to the outside as far as they will come. The patient is now placed upon his left side, with the thighs and legs well flexed and the hips somewhat elevated. Introduce the needle into one end of the long axis of the tumor and push it through until the point can be felt impinging upon the opposite side, being very careful that it does not go clear through, for if this is done and the point is drawn back again, it leaves an opening that will allow the fluid to flow through and injure the adjacent tissues, and the benefit of the injection will be lost. After having pushed the needle to the extreme opposite side of the tumor from where it entered, a few drops of the fluid are forced out of the syringe and the needle slightly withdrawn, when a few more drops are injected. This is repeated until the point of the needle reaches the point at which it entered. If the tumor is very large the needle may have to be again introduced at an acute angle to the first track, and a new series of drops deposited on each side and nearly parellel with the first puncture. Only one opening should be made through the outside of the tumor. As the injection is being made a white appearance is seen to creep over the surface of the tumor, and this indicates pretty well the amount of injection fluid that should be used, for the appearance of this blanched, bloodless condition shows that the tumor from the point of the needle to the surface has been completely cauterized. In case the tumor has a springy feeling, as though filled with fluid, it shows that either enough acid was not used or enough time was not taken in making the injection. If done too hastily part of the acid is apt to flow out where the puncture was made when the needle is withdrawn. If the patient is willing to go to bed for a few days all the tumors may be operated upon at one time, otherwise only one large one or two small ones should be injected at the first operation and the rest left until another time, which should be at least ten days after the first operation. After operating the tumors should be oiled and returned into the bowel. If more than one large one or two small ones are injected at one time it is best to introduce an opium suppository.

I have tried about all the different formulas that have been recommended, but have found nothing superior to a 50 per cent. solution of carbolic acid. I mix an ounce of the acid crystals, previously dissolved in a water bath, with an ounce of equal parts of glycerine and distilled water. All the different formulas contain the carbolic acid, and as it is really the only thing that is of any benefit it is all that is needed. I add the water to dilute with and the glycerine to remove somewhat the burning sensation of the acid as it is being injected, which it does much better than water or any other fluid with which I am familiar. The addition of glycerine alone, without any water, makes the fluid too thick to flow through a hypodermic needle.

To sum up, then, I would say, in properly selected cases the treatment just outlined has a field of usefulness, also that in case of persons who cannot take an anesthetic it may be of service. While I believe that by its use any case may be cured, it matters not in what condition they are, I am sure there are serious objections and dangers which should absolutely prohibit its use except in cases such as I have described as suited to its use. The fact that a patient refuses any other operation ceases to have any effect with me, for if they are not willing to submit to my judgment as to the method of treatment after the diagnosis is made they will have to go to someone else. I believe a physician's reputation is too valuable to be jeopardized by allowing the patient to dictate his line of treat-

Digitized by Google

ment, and it is better to let a patient go occasionally, and know that you have done your duty, than to institute a line of treatment that you know is not for the best interests of the patient. My objections to this plan of treatment are summed up under the following heads:

First—Pain. No one can tell how severe it will be, or how long it will continue.

Second—Ulceration. Some of the fluid is very apt to be thrown into the connective tissue and establish an ulceration that may last for weeks or result in an abscess or fistula.

Third—Abscess, as a result of the ulceration.

Fourth—Fistula, also as a result of the ulceration and abscess. I have seen bad internal fistula as a result of this operation.

Fifth—The impossibility of telling your patient what the result is likely to be or how long it will take to cure him. In fact, the whole operation must be done on the expectant plan, and no one can tell just what may happen at any time.

There are some other complications that are said to arise, but I have never seen any of them. Matthews says there may be an abscess of the liver, sudden death, sudden and dangerous prostration, impotence, carbolic acid poisoning, dangerous hemorrhage, etc. It may be possible for these to occur, but I have never seen any of them in my practice. One thing which they refer to as a complication is sloughing. This, in my opinion, is the object to be attained. The tumor should be so thoroughly cauterized that it is killed and the circulation entirely destroyed. Of course if this occurs there is nothing left for it to do but slough off. I believe that any operation short of this would result in only temporary relief, and in time the tumors would return as bad as ever. Some claim that where the tumor is entirely destroyed it comes off en masse and there is no true slough. In this I am sure they are in error, for if careful search is made pus can be found, and it is not uncommon to see mild indications of pyemia, with light rigors and elevation of temperature at the time when the tumor is separating from its attachments.

It seems to me, then, that the operation has a very limited field of usefulness, and that while it gives good results in a very few well selected cases, in the majority of those that come to the surgeon for treatment its dangers and complications are too important to be overlooked, and other means that are known to be safe and sure should take its place.

DISCUSSION.

Dr. Morton, of St. Joseph, Mo., said the writer had not summed up all the objections to this method. Where there are other methods just as safe, that are better, surer to result in a permanent cure, and are more scientific, there is no excuse for using this one. When we have injected carbolic acid it is beyond our control, and to say the least, the result of the coagulation is unsurgical. The sloughing which we want to take place may not stop where we want it to stop. Pyemia may result and serious abscesses have occurred.

Dr. Denise, of Omaha, said that two methods were recognized from the surgeon's standpoint, one by the ligature and one by the clamp and cautery. These stand at the head for safety and efficiency. In the injection method there are a great many dangers, and while traveling quacks have made an apparent success of it, the harm they did was generally kept in the background. He had used it himself when he was in general practice, and with success in many cases.

Dr. Summers believed that it is a good thing if properly done and with antiseptic precautions. He said he intended to use it more in the future than he had done in the past.

Dr. Robertson, of Council Bluffs, had very successful results from the injection method.

Dr. Mason in closing said that there is no use in using a small amount of the fluid. It must be thoroughly done, or the results would be disappointing. He believed 50 per cent. of carbolic acid is strong enough.

PROFESSIONAL DEGENERACY.

BY FREDERIC S. THOMAS, M. D.,
COUNCIL BLUFFS, IA.

To write a paper laudatory of our profession is an easy task. It requires but a superficial glance to see the ethical nobility of our medical associates. Should we, however, enlarge our field of vision, and weigh members of our profession upon a scale whose accuracy has been vouched for by the custodians of our code, we become startled at the signs of degenracy.

When the fathers of rational medicine wisely formulated our present code of ethics they must have seen, prophetically, that commercialism would find its way into our ranks in the near future. They were gentlemen of the old school, who regarded the profession of medicine as a noble art. They felt that when they were ministering to the sick they were assuming a great responsibility. That the subjects they had to deal with were not matters of mere speculative curiosity, nor were they for sordid gain alone, but that they involved questions of life and death. They realized that the comfort or misery of many hung upon the notions that each entertained. It was not strange, then, that they should have formulated that wonderful pledge of professional honesty. Like the adherents of the early Christian church, they would rather die in martyrdom than to do violence to their conscience, or, as medical men, to violate their hippocratic oath.

In the closing years of the nineteenth century we witness a complete change in the affairs of men. We have become a people grasping after wealth and position. Labor, who once placed her burden upon the shoulders of the people, developing their physical manhood and cultivating within them sentiments of honor and justice, has lifted her load. Genius, through her artful connivance, has transferred it to the machinery of earth. The electric current and the other forces of nature have been harnessed to do the work once the province of man alone. Travel, by her

* Read before the Medical Society of the Missouri Valley, Council Bluffs, Ia., September 16, 1897.

Digitized by Google

slow methods, once brought her people into intimate relationship with one another, now whirls them by without recognition. Science, through her wonderful discoveries, has disturbed the quiet repose of the church and revolutionized the culture of the age. Is it strange, then, that so many of those who compose our profession should have been caught in this commercial maelstrom and carried so far from their moorings and to have lost sight of the ethics which belong to them?

We see physicians, who are occupying places as teachers in medical colleges, once filled by men of superb professional honor, now degrading their calling by advertising, by pen and speech, the pharmaceutical compounds, which are flooding the markets with such profusion. Our medical journals have page after page burdened with the praise of medical nostrums that are being pushed upon the market with as much effrontery as the patented preparations. We receive pamphlets and circular letters extolling the virtues of numerous medicines with euphonic names, all bearing certificates from medical men high in the profession. This commercialism and desire for notoriety which has besmeared the escutcheon of some bright men in the east and south, has not yet reached the central west. Formerly the manufacturers of medicinal preparations depended upon preachers and politicians to do their bidding. Several years ago a vice president of the United States certified that a medicine called "Cundurango," which was being extensively advertised at that time, had "cured his mother-in-law of a cancer." It was with sadness that the nation learned, in a short twelve months, that his good mother-in-law had "succumbed to that disease." Even the great Henry Ward Beecher was not averse to append his name to medical certificates. Surely such a thing points with its finger upon the dial of destiny that the learned professions are being swallowed up by the greed of the money-changers, or else moral degeneracy, with its concomitant evils, has taken possession of them.

It must be admitted that several manufacturing chemists have placed in the hands of the regular profession several preparations of merit, and have made many nauseous drugs palatable. To this class we offer no criticism. Their task is praiseworthy and their medicines meritorious. We of the regular profession have had much to say regarding homeopathy and its twin sister, osteopathy, forgetting that regular medicine was introducing and fostering in its own ranks the most gigantic pharmaceutical debauchery of the century.

I am led to believe that the members of this society will still cling to the precepts of honor taught us by the fathers of regular medicine, keeping in the very front rank as students and investigators of everything that belongs to rational medicine, but avoiding that which would debauch us and make us no better than the traveling mountebank. Our names will not appear in the tons of printed matter so carefully mailed to every postoffice in this medicine-cursed land of ours, but they will be engraved in the hearts of our intelligent clientele, and perhaps remembered by those who may follow us as being medical men who were honest with their patrons and the public at large, and ethical with one another.

A CONTRIBUTION TO THE SURGERY OF GASTROPTOSIS AND ENTEROPTOSIS.*

By BYRON B. DAVIS, M. D.,
OMAHA, NEB.,
SURGEON TO IMMANUEL HOSPITAL; PROFESSOR OF CLINICAL SURGERY, OMAHA MEDICAL COLLEGE.

The disease known severally as Glenard's disease, abdominal ptosis, prolapse of the abdominal viscera, and gastroptosis and enteroptosis has scarcely yet obtained the general recognition its importance deserves. The fact that Glenard found it present 400 times in 1,300 patients complaining of digestive disturbances, while Ewald found it in 13 per cent. of his cases, proves that it is not a rare malady. The pains and aches, the restlessness and insomnia, the malnutrition and tedious invalidism which the disease produces give it a dignity not to be ignored.

Many a poor woman has suffered for years with weakness and lack of all snap and endurance. She becomes easily tired, is always constipated, and her digestion is poor. Any acute illness is recovered from slowly. She is regarded as a neurasthenic of higher or lower degree; is usually looked upon as an uninteresting and tiresome hypochondriac. But if she always complains, it is because there is good cause for complaint. If she lacks energy, it is because the workshop in which the physical and mental force is elaborated is equipped with defective apparatus which cannot turn out a perfect product. What more natural than to suppose that the generative system is at fault. She often has endometritis, cervical and perineal tears, even ovarian and tubal disease in a mild form. Surgery directed toward the repair of these defects is anatomically successful, but symptomatically worse than useless. The gynecologist is perplexed, the patient discouraged. To find the reason for such failures, in the light of recent studies, one need not go far afield. The generative defects are often trivial coincidences, and are not the cause of the symptoms. Because a woman has headache and a pain in her stomach one has no right to jump to the conclusion that her torn cervix is the particeps criminis. Reflex troubles certainly exist, but the term "reflex pain" has latterly become as much a cloak to hide ignorance as are "rheumatism," "malaria," "neurasthenia," and "heart failure."

To make a diagnosis of gastroptosis the exact position of the stomach must be determined. If the lesser curvature is found half way or more from the ensiform cartilage to the umbilicus, no doubt can exist that prolapse, not only of the stomach, but of the intestines is present. In all these cases there is also decrease of abdominal tension. When the diagnosis is made the line of treatment laid down by Glenard seems rational. The intestines must be held up and the abdominal tension increased by an abdominal

*Read before the Medical Society of the Missouri Valley, Council Bluffs, Ia., September 16, 1897.

Digitized by Google

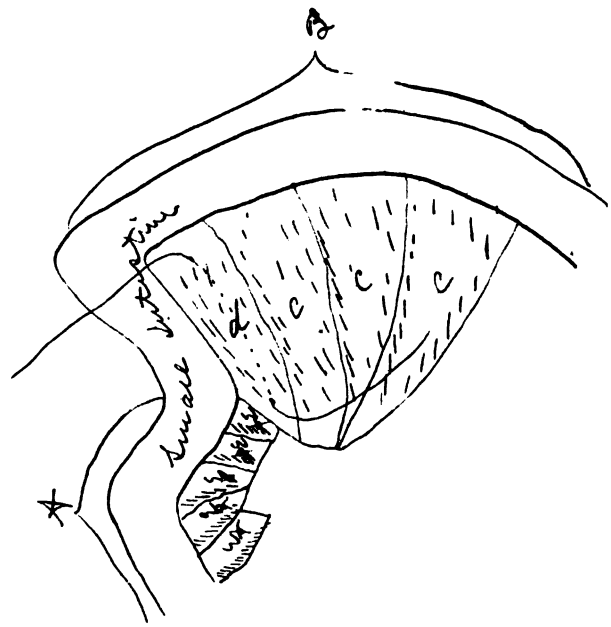
bandage. The diet must be in accordance with the needs as determined by chemical examination of the gastric contents. The bowels must be regulated, and electricity, massage, strychnia, and stomach lavage used. Medical and hygienic means must be exhausted before operative measures are to be thought of. Whether surgery will ever play an important role in gastroptosis and enteroptosis is uncertain. So few and recent are the cases thus far reported that there are not yet sufficient facts upon which to formulate an opinion. This much is certain: operation for the restoration of the displaced viscera seems rational; and, in the face of the pitiful condition of this class of sufferers, no mode of relief which offers hope should be neglected.

It seems proper that every case bearing upon this subject should be reported. Thus far, in all reports to which I have gained access, surgical measures have been limited to gastropexy and gastrorrhaphy. As will be seen, I have gone farther than this. Gastropexy has given place in my work to forming a new attachment for the lesser omentum, the natural ligament which supports the stomach. Shortening the mesentery has not before been attempted, and only a study of the results can determine its feasibility. The same can be said of shortening the gastro-colic omentum.

CASE I.—Mr. E., farmer, single, aged 63 years, first presented himself in February, 1897. Was suffering from a very large abdominal hernia, extending from two inches above the umbilicus to the symphysis pubis. When he stood the recti muscles were separated for a distance of three or four inches, a large portion of the abdominal viscera being extruded. When recumbent the viscera were reduced and the skin covering the hernial sac could be invaginated into the abdominal cavity and the recti muscles grasped as easily as if the abdomen had been opened. The hernia made its appearance six or seven years ago, soon after a laparotomy for the removal of an omental or intestinal tumor—the nature of which I have been unable to learn. The incision was a large one, for the scar extends from midway between the ensiform and umbilicus to the pubes. He complains of severe pain in right umbilical region, supposed to be due to adhesions. In the erect position there is much discomfort from a sense of fullness in lower part of abdomen. He has also a left inguinal hernia the size of a goose-egg, which can only be reduced with difficulty. An attempt to cure both of the herniæ was decided upon, and the double operation was carried out at Immanuel Hospital, February 20, 1897, in the presence of the students of the Omaha Medical College. Nothing of special importance was discovered except the great descensus of the stomach and intestines; and, at the time, I stated that this would be a favorable case for anchoring the stomach. Patient was discharged from the hospital in four weeks. Re-entered the hospital July 9, 1897. There has been no recurrence of the herniæ, but he complains bitterly of pain in the right umbilical region, where the old adhesions had been, they having re-formed. When in the recumbent position his abdomen looks flat and almost natural. But when standing the lower abdominal wall bulges in every direction, while above the umbilicus the cavity seems empty. The shape of the abdomen might be compared to that of half a pear with the large end down.

Without the knowledge gained at the previous operation, it would have been easy to make a diagnosis of gastroptosis and enteroptosis, with new adhesions. Being willing to submit to any treatment which offered any hope of relief, he was prepared in the usual way, and July 12, 1897, the following operation was carried out:

A median incision was made from near the ensiform cartilage to an inch below the umbilicus. The adherent omentum was first detached and a portion of it ligated and removed. Next the stomach was drawn up into its normal position and the lesser omentum near its reflection upon the stomach at its lesser curvature was fastened to the peritoneum near the ensiform cartilage by means of fine silk sutures. The stomach was not especially dilated, and gastorrhaphy was not performed. The transverse colon was fully six inches



A, Portion of intestine whose mesentery has been shortened.
B, Portion of intestine whose mesentery has not been shortened.
c, c, c, Triangles of mesentery not shortened.
d, Triangle with suture in place, but not tied.
e, e, e, Triangles shortened by suture.

from the greater curvature, the gastro-colic omentum having been greatly stretched. A tuck was taken in the gastro-colic omentum, being careful to avoid the vessels, and not allowing the sutures to penetrate more deeply than through the anterior peritoneal layer of the omentum. This shortened the distance between the transverse colon and greater curvature to two to three inches. The small intestines were now brought forward and the mesentery found to be so much elongated that the loops of intestine could be raised four or five inches above the level of the abdominal wall without undue tension. Beginning now near the upper end of the jejunum, a loop was brought forward. To shorten the mesentery without interference with the intestinal blood supply was the problem

Digitized by Google

before me. The isosceles triangles, bounded at the base by the attached border of the intestine, and having for their sides the arteriæ intestini tenuis, branches of the superior mesenteric, were elongated, the distance from their apices to their bases being from three to four inches. Anything might be done to shorten these triangles, if there was no interference with the circulation at their borders. Armed with a long, slender needle, carrying No. 4 silk, the needle was inserted near the apex of a triangle penetrating the mesentery in one direction and brought through in the opposite direction at the center of the base near the attached border. The suture being drawn through, was tied, forming a reef in the mesentery at this point and shortening it from two to three inches. After several sutures had thus been introduced and tied in contiguous triangles, close examination showed that the circulation was unimpeded. Sutures were thus used the entire length of the small intestine, not in every interarterial space, but almost that closely. Between the upper jejunum and the ileo-cecal valve ninety-two sutures were employed. The mode of introduction of the sutures and what they accomplished can be best understood by a glance at the diagram.

The time of the entire operation was one hour and fifty minutes. No shock. Patient did well, with the exception of some pain in the region of the loosened adhesions. There was no distension. Bowels moved the third day. Was up the twentieth day, and left the hospital August 9, exactly four weeks from the day of the operation. It is still too early to ascertain the results. There is apparent improvement. The abdomen, when patient is standing, is much more nearly normal in contour, and he no longer has the distressing feeling of pressure in the lower abdomen that he had before.

Case II.—Mrs. P., aged 30 years, two children. For two or three years has been suffering from great distress after eating; also when she stands there is much downward pressure and bulging of the lower abdomen. She also sometimes, when changing from a reclining to the upright position, complains of a slipping feeling as if some of her abdominal viscera dropped downward. Constipation is obstinate, much headache, and is very nervous. Liver dullness is found to extend downward one and one-half inch. Lesser curvature is one inch above the umbilicus. Stomach empties itself promptly, proving absence of pyloric stenosis. Analysis of stomach contents removed one hour after the Ewald-Boas test breakfast about normal. Acidity was 60; HCl., present; lactic acid, absent; propeptone, peptone, pepsin, and rennet ferment, present. This was the condition September 2, 1897, after having done a cervix and perineum operation five weeks before and having treated her during all that interval on the principle as laid down by Glenard. As there had been no improvement, and the patient was very solicitous to have something radical done, an operation to restore as far as possible the position of the viscera was decided upon.

Operation.—September 4, 1897, 9 A. M. The abdominal incision extended from near ensiform cartilage to an inch below the umbilicus. The stomach was found exactly as previously outlined, the liver somewhat enlarged. The lesser omentum, near its attachment to the lesser curvature, was stitched by means of No. 4 silk to the peritoneum on a level with the ensiform cartilage. The stomach, being considerably dilated, gastrorrhaphy was performed. This served the double purpose of reducing the size of the stomach and raising the transverse colon. As the gastro-colic omentum was not elongated, nothing was done with it.

Unlike Case I, the elongation of the mesentery had not resulted in enlarging the triangles near the attached borders. These triangles were so short that nothing could be accomplished by the method adopted in Case I. Shortening was accomplished by several silk sutures used like gathering stitches at the posterior part of the mesentery and only including one peritoneal surface. It seemed to accomplish the result without any interference with the circulation. Time of operation one hour. No shock. There was no distension and bowels moved, after using a laxative, the third day. Dressings were changed and sutures removed the ninth day. This is the thirteenth day, and if the patient were allowed she would have been up three or four days ago.

As all will recognize, the methods adopted by me are a wide departure from those hitherto practiced. In operations reported the stomach has been anchored into position by suturing it directly to the peritoneal layer of the abdominal wall. Surgeons have frequently been called upon to liberate adhesions binding the stomach to the abdominal wall on account of the suffering caused. I should hesitate to produce artificially a condition which is so likely to be followed by pain. On the other hand, the lesser omentum is the natural ligament of the stomach, and if it is shortened or receives a new fastening, no unpleasant consequences would be expected to follow. The shortening of the round ligaments and ventro-fixation of the uterus are not exactly analogous conditions, for the regular gastric peristalsis would render gastropexy much more likely to result in disappointment than ventro-fixation or suspension of the uterus. Overstretching of the gastro-colic ligament is probably rare, but when it exists I can see no other method of raising the transverse colon to its normal position than taking a tuck in the ligament. Gastrorrhaphy, which seemed to accomplish its purpose perfectly in Case II, would still have left the transverse colon six inches from the greater curvature in Case I.

It has been shown by Glenard, Ewald, Einhorn, and others that in all cases in which gastroptosis is found, not only is there descensus of the transverse colon, but also elongation of the mesentery. It is probable that the stretching of the mesentery occurs coincidently with the descent of the colon and stomach, if it does not actually antedate the gastroptosis. Whichever order is followed in the first occurrence of the displacements there can be no question that when the stomach is anchored and gastrorrhaphy performed while the mesentery remains abnormally long, that the latter condition invites recurrence. On the other

Digitized by Google

hand, when the mesentery is shortened in conjunction with the other operations, there would seem to be a chance for a permanent cure. But in either event, unless great care is used to eliminate the original factors which caused the disease, relapse is to be expected.

DIPHTHERIA.

By E. C. RANKIN, M. D.,
M'LOUTH, KAN.

I am aware that the physician who has the temerity to champion any other mode of treatment for diphtheria than antitoxin will be voted "a back number," and therefore unworthy the notice of the progressive members of the profession. I wish only to say, by way of apology, that it is not the purpose of this paper to antagonize the antitoxin or any other treatment that promises to lower the death rate of a disease that is dreaded alike by physician and layman. But the fact that the treatment here outlined has been used the [illegible] three years without a death should entitle it to some consideration, I think.

It is true this period has not been marked by any severe epidemic, yet a number of cases have been of such severity as to fully test the potency of the treatment. This plan of treatment is not original with me, but is a kind of mosaic, made up from what appeared best in the experience of others, to whom due credit would gladly be given could I recall their names.

After making a satisfactory diagnosis of the case, I begin by giving powders of calomel (usually one grain for each year of child's age) every two hours, combined with an equal amount of sugar of milk to facilitate swallowing. This is continued until copious dark green discharges are passed. Then the calomel is stopped and a powder composed of equal parts of sozo-iodolate of sodium and sulphur precipitate is blown in the throat so as to cover the affected part every four hours. This is best accomplished with a powder blower, though a paper quill answers the purpose quite well. If the patient is quite young an equal part of sugar of milk is added to the powder, reducing its strength one-third. If there is fever with a bounding pulse, the following is alternated with the throat powder:

℞ Tr. aconite rad. . . . . gtt. iij.
Ext. bellad. fl. . . . . gtt. iij.
Aqua cinnamonii . . . . ℥ iij.

M. Sig.—One teaspoonful at a dose every two to four hours.

Should the temperature be normal or subnormal, with a weak pulse, instead of the above something like the following is given:

Tr. ferri chloridi . . . . ℥ iij.
Potass. chloridi . . . . ʒ ss.
Glycerina . . . . . ℥ j.
Syr. . . . . q. s. ad. ℥ iij.

M. ft. sol. Sig.—One teaspoonful, well diluted, every four hours.

Whiskey or brandy is given freely, and milk ad libitum. If symptoms of heart failure occur nitrate of strychnia is given as symptoms require.

The points claimed for this treatment are a short period of treatment—the membrane usually separating in three or four days—and consequently a rapid convalescence, with less tendency to paralysis or heart failure following convalescence. It is simple and easily carried out. And last, but not least, it is thoroughly antiseptic, thereby serving as a protection to other members of the family.

EARLY SIGNS OF TYPHOID FEVER.*

By WILLSON O. BRIDGES, M. D.,
OMAHA, NEB.,
PROFESSOR OF MEDICINE, OMAHA MEDICAL COLLEGE.

A combination of symptoms which renders a diagnosis of typhoid fever reasonably probable does not occur before from the seventh to the tenth day of the disease. In many of the severe cases the intensity of certain early symptoms and the mildness of others common to the disease will frequently lead one away from a probability of typhoid fever. One case in my own practice presented a most intense generalized bronchitis with fever from the beginning of the illness, and the case to me was bronchitis, until its protracted nature, and a continued fever with characteristic symptoms developing, made me aware of my error in six or eight days. Another case, seen in consultation, had such severe headache from the outset, accompanied by fever and slight delirium, that even for the first ten days a diagnosis of meningitis was adhered to by the attendant.

Again, in that most peculiar type of cases known as "walking typhoid," in which the patient himself will not admit a sufficient degree of illness to take to his bed, the entire history of the case may be run without the disease being detected; and even if under the care of a physician, a certainty of diagnosis may not be entertained unless a hemorrhage or perforation occurs. A few years ago a man at Fort Omaha, who had been to the doctor's office several times for a slight indisposition, was seized with severe pain in the abdomen, followed by signs which led to a suspicion of perforating appendicitis. At the autopsy the characteristic ulceration of Peyer's patches revealed the true nature of the disease.

Between these extremes is that vast number of cases which tally more closely with the clinical history of the books, and yet which give the physician much perplexity if he is called early in the case. No wonder, then, that there are so many cases of malaria which in a week or ten days run into typhoid, and that so many patients are threatened with typhoid fever, but it doesn't show up. Typho-malaria is a pretty good term to help out sometimes. We hear, too, nowadays of a great many cases of aborted typhoid fever, the literature of which is so energetically circulated by manufacturing pharmacists, who are more interested in selling drugs than in posting the profession. I must say that in a perusal of these pamphlets I have

* Read before the Medical Society of the Missouri Valley, Council Bluffs, Ia., September 16, 1897.

Digitized by Google

been struck with the want of such a combination of symptoms and signs in the reported cases as would warrant one to question the correctness of the diagnosis in many of them.

In hospital practice it is a very easy matter to postpone judgment; to study the fever chart, the pulse record, the abdomen, feel for the spleen, and realize that you are waiting on nature to help you out; but what about the practitioner in private practice, whose every visit is looked forward to with the assurance that surely he will then know what the trouble is, if he hasn't already made a guess? Fortunate, indeed, is he who is called late enough to find a fever which is said to have been running a week, and characteristic symptoms which will enable him to be an expert in quick diagnosis. I remember well a friend, who, on my return from a few days' absence, came into my office and said he had been ailing a few days, and with fever. He had then a temperature of 105°, pulse 90, furred tongue. On baring his forearm to take the pulse I noticed a suspicious spot. Examination showed a number on the chest and abdomen. He went home at once and to bed, remaining there through a severe typhoid fever of six weeks' duration.

It is my purpose to-day to call attention to a few signs which I believe are a great aid in earlier diagnosis than the accustomed time, and which are not taken cognizance of by more than a few scattered observers. These are the pulse rate and character, the Diazo-benzol urine reaction of Ehrlich, and the Widal bacteriological test.

It has been my experience that in the vast majority of cases of typhoid fever the pulse rate in the first ten days is not in proportion with the fever, and that in quite a large proportion of cases this rule holds good throughout the disease. One of the first cases in my early practice presented this relation so markedly that I have since paid much attention to it. The patient was a man whose temperature frequently reached 104° F., and yet the pulse rate was not found to exceed 84 at any time in the illness. With a lower temperature, the pulse would be proportionately lower. The fever in this case lasted four weeks. In my friend, before referred to, with a temperature of 105°, the pulse was 90, and yet the man had been in his office at work. I have just discharged a girl of 18, of nervous temperament, whose temperature several times reached 105°, and frequently 104°, whose pulse, on only two occasions, rose beyond the 100 mark. Even in children I have noted this same relation. In some diseases the reverse holds true,—as in appendicitis. In acute tuberculosis and in malarial remittent fever, —diseases which are sometimes mistaken for typhoid fever,—the pulse is high from the start; that is to say, above 100 and proportionate to the fever. In influenza and the simple fevers from acute catarrh of the air passages the same is found perhaps in less degree. Very frequently the pulse in typhoid fever is dicrotic, although this is more apt to be found later than the tenth day. It may be so marked that error in counting is possible unless the heart is auscultated at the time. A dicrotic, proportionately slow pulse, in a case of suspected typhoid fever I should regard as highly diagnostic.

The Ehrlich urine test has been before the profession a number of years; is referred to in all the late works on practice, and in some special works is given an importance in differential diagnosis which I believe is not appreciated by the profession at large. The reaction is dependent upon the effects of treating the urine which appears to contain a chromogen in typhoid fever and certain other pathologic conditions, with a solution of diazo-benzene-sulphonic acid and ammonia, which results in the production of a color to the mixture which may vary from eosin to a deep garnet red. It has received the name of "Diazo-reaction," "Diazo-benzol reaction," or "Ehrlich's test." It was at first supposed to be pathognomonic of typhoid fever, but later observations have shown that it occasionally exists in scarlet fever, measles, malaria, small-pox, pneumonia, and tuberculosis. Simon, in his late work on clinical diagnosis, states in this connection: "Still there appears to be no doubt that its occurrence in doubtful cases may be regarded as pointing to typhoid fever, especially when found between the fifth and fifteenth days. The author has studied this question in a large number of instances, and has arrived at the conclusion that while the reaction may be observed in other diseases, it is not difficult to distinguish between those and typhoid fever, excepting certain cases of acute miliary tuberculosis. As the reaction, however, is obtained not later than the twenty-second day, and is usually present as early as the fifth or sixth day in typhoid fever, and while it does not appear earlier than the beginning of the third week in acute tuberculosis, and then persists to the end, its occurrence may be of decided value in diagnosis in many instances."

The method of making the test is as follows:

Solution 1.—50 c. c. of hydrochloric acid diluted to 1000 c. c. and saturated with sulphanilic acid.

Solution 2.—½ per cent. nitrite of sodium.

These should be kept in separate bottles. Forty parts of solution No. 1 are thoroughly shaken with one part of solution No. 2, and to the mixture is added an equal amount of urine in a test tube. This is then shaken until it is quite foamy at the top, when a few drops of aqua ammonia are deposited upon the foam. The Diazo-reaction is then manifest by a pinkish hue of the foam resulting, and a carmine ring at the junction of the deposited ammonia and the urine.

Simon reports a method which he claims is more convenient and more delicate: "A few c. c. of urine shaken with an equal quantity of the sulphanilic acid mixture in a test tube; 1 c. c. of ammonia is then allowed to run carefully down the side of the tube, forming a colorless zone on top. At the junction of the two a more or less deeply colored ring will be seen, the slightest carmine tinge being shown more readily by contrast with the colorless zone above and the yellow below. If this mixture be then poured into a porcelain basin containing water a salmon red color will be obtained if the reaction is positive, while a yellow or orange color is obtained when negative. I

Digitized by Google

have made some observations with the Ehrlich test during the past year or more, and if future experience corroborates the few histories which I will cite, I shall continue to feel that attention in this direction has been neglected.

OBSERVATION I.—Male, age 35; test made the 8th day of mild typhoid; reaction positive; fever not above 102½° at any time; rose spots; nose bleed; course, nineteen days; test, when temperature became normal, no reaction. In five days, relapse. Fourth day of fever a test made, positive reaction. Very severe run of six weeks, attended by delirium, high fever, and hemorrhages.

OBSERVATION II.—Male, child, 18 months old; ill with fever five or six days; nose bleed twice; slight diarrhea; test made, positive reaction. Three days later spleen palpated; rose spots unmistakable. Fever ran seventeen days.

OBSERVATION III.—Female servant, age 24; office visit temperature, 102.5°; headache, malaise, furred tongue; history two days; calomel, quinine, phenacetine prescribed. Called to house the next evening. Temperature 104°; no tympany or rose spots; spleen not palpable. Following morning test made, positive reaction; sent to Immanuel Hospital, where two weeks later, through the courtesy of the resident physician, I found well marked severe typhoid had developed.

OBSERVATION IV.—Male, age 12; ill four days; headache; anorexia; furred tongue; fever; temperature 104°. Parents very uneasy, as they had lost two other children in previous years, and attendant was not certain as to diagnosis. Test made, diazo-reaction, positive. Four days later was informed that rose spots and other signs of typhoid had developed.

OBSERVATION V.—Female child, age 2; fever, restlessness, and slight diarrhea four or five days; furred tongue; slight tympany; temperature 102.5°. Test made, no reaction. Fever and other symptoms disappeared within forty-eight hours.

OBSERVATION VI.—Female servant, age 18; ailing three days; headache, malaise, chilliness, fever, but had been at party night before; temperature 104°; tongue furred; constipation; no tympany; slight gurgling right iliac region. Test made the following morning, positive reaction; sent to Methodist Hospital, where she ran through a severe typhoid of four weeks' duration.

OBSERVATION VII.—Female, age 13, seen on third day of fever; headache, furred tongue, constipation; child had not been well for several weeks; temperature 104° at visit. Test made before second visit the following day, positive reaction. Subsequent history, typical of typhoid, fever reaching 106° on one occasion.

OBSERVATION VIII.—Female, age 23; history of two weeks' fever, accompanied by delirium, severe pain in right hypochondrium, diarrhea, nose bleed; temperature had been 105°, but was irregular. Abdominal distension, marked tenderness, a few suspicious rose spots, spleen palpable. Typhoid fever epidemic in the locality, but a previous consultant had diagnosed abcess of the liver. Test made, positive reaction. The fever ran two weeks longer, atypically, but the patient finally recovered, and I have no question of its typhoid nature.

OBSERVATION IX.—Female, age 18; ill three days; headache; sleepless; fever; anorexia; temperature at visit 104.5°, pulse 100. Prescribed large doses of phenacetine and quinine and calomel. Test made following morning, positive reaction. On visiting the patient later found temperature 98.8°. Symptoms relieved. Somewhat nonplussed, asked to be called if anything further needed. Summoned same evening; temperature 104°; typical rose spots developed eighth day, and fever ran twenty-two days.

OBSERVATION XI.—Specimen urine sent in from the country to me, and sputum to my brother, Dr. E. L. Bridges. Case history in doubt by attendant as between typhoid fever and early tuberculosis. Test made of urine, no reaction. Sputum examination showed tubercle-bacilli.

OBSERVATION XII.—Male, age 60; ill eight days with fever; restlessness; cough; slight delirium at night; temperature 103°; evidences of general bronchitis. Some tympany and two or three suspicious rose spots found. Question of diagnosis between bronchitis and typhoid fever with consultant. Test made, no reaction. Hypostatic congestion rapidly developed, the pulse became irregular and intermittent, and death occurred in a few days from cardiac failure. No autopsy, but I think the history and age pointed to pulmonary trouble.

OBSERVATION XIII.—Female, age 23, ailing three or four days; headache; backache; some chilliness and fever; temperature in office 102½°. Prescribed quinine and phenacetine, small doses calomel. Reported by telephone next day no better; day following, office visit, temperature 102°; still ailing; urine test, no reaction. Increased quinine, reported two days later no further trouble.

OBSERVATION XIV.—Female, 8 years; still under observation; ill three days with fever; slight diarrhea; inclined to be up and at play; no complaint; restless at night; temperature 103°; tongue furred; urine test, no reaction. Fever continued. Following day test again, slight reaction, which was positive at a subsequent examination. She is now in the nineteenth day of the fever, with rose spots, palpable spleen, and a declining temperature.

In the above list it will be noted that in every instance in which the reaction was obtained, corroborative diagnostic symptoms of typhoid were either present at the time or subsequently developed; also, that in those which gave a negative reaction, in no instance did typhoid fever develop, unless the case of the aged man who died of cardiac failure and hypostatic pneumonia could by possibility have been such. In all, with one exception, the positive reaction gave rise to a reasonable certainty of typhoid fever from three to five days prior to such developments as could be considered conclusive.

True, these cases represent but a small number, yet it can certainly be appreciated what an aid in diagnosis resulted at a comparatively early period. The

Digitized by Google

reaction is so constant, says Tyson, "that it is to be deservedly regarded as a symptom." A. R. Edwards found it present in 128 out of 130 cases. Tyson states that he never found it absent when the test was made sufficiently early. It is found as early as the fourth day in many cases, and not usually later than the nineteenth. The diseases liable to be mistaken for typhoid fever, in which the reaction is found, are some cases of malaria and miliary tuberculosis. In the former the detection of the plasmodium in a blood specimen would eliminate typhoid, and in miliary tuberculosis it does not occur until late, and then is persistent. I have tested a number of pulmonary tuberculosis cases and found it in only one advanced case.

The Widal blood test is of recent date, and doubtless you are all familiar with the general literature on this subject, which has been so extensive within the past year. It is made by adding blood serum from a typhoid fever case to a fresh culture of the Eberth or typhoid bacillus, when, in a few minutes, clumping and diminished motility of the latter are seen to occur. Dried blood diluted several times with water will have a like result. So far as the observations have gone, it is considered highly diagnostic, although the chance for error is in the fact that the blood from one who has had typhoid fever within a year previously may show the same effect. The reports from the New York health department last February indicated that out of 130 cases where the clinical history had pointed strongly to this disease, in 101 the reaction was obtained. The period of the disease in which this was manifest is interesting: in the first week, 70 per cent. of positive results; in the second, 69 per cent.; in the third, 75 per cent.; in the fourth, 92 per cent. (Park.) From his observations in all cases, including those other than typhoid, Park states his opinion that if the reaction appeared with a serum dilution of 1 to 50 the case could be positively pronounced typhoid fever. If the reaction appeared with a dilution of 1 to 25, about 1 per cent. of such cases would not be typhoid. Elsberg examined the blood or serum of 410 cases, 262 of which were typhoid fever, and 148 of other diseases seen in a general hospital. In only one of the latter was the reaction present. Of the typhoid cases, it was manifest the first week in 8 per cent.; but in 86 per cent. it was present within two weeks. I have had no experience with this method. It certainly must be a great aid in doubtful cases, and when found in the first week it enables one to attain a reasonable degree of certainty, in connection with the Ehrlich's test, before the full development of the disease.

In the last number of the American Medico-Surgical Bulletin (September 10), may be found an exhaustive article by Professor Welch of Johns Hopkins Hospital upon all the phases of the Widal test. He states that Widal and Sicard found absence of the reaction in only one of 163 cases of typhoid fever examined by them. Of 116 cases examined by Courmont the reaction appeared in all, being delayed after the eighth day in only five. Of 70 examined by Chantemesse it was present in all. He sums up as follows:

1. Experience has demonstrated that the method of serum diagnosis of typhoid fever is of great practical value.
2. The alteration of the blood on which this method is based is a specific effect of infection or intoxication with the typhoid bacillus.
3. The microscopic serum test is to be preferred to the macroscopical test.
4. Quantitative determinations, relating especially to the culture, the time limits, and the dilution of the serum, are of importance, and, at least in doubtful cases, should not be neglected.
5. As the reaction may be delayed, or occasionally absent, a negative result of the test does not exclude the diagnosis of typhoid fever.
6. The persistence of the reaction, sometimes for years after recovery from typhoid fever, is to be borne in mind in interpreting the reaction in febrile conditions. The appearance of the reaction and its increase during the period of observation speak for fresh typhoid infection.
7. The danger of mistakes from positive reactions in non-typhoid cases can be guarded against in nearly all cases.

EMPYEMIA.*

By A. W. SHERMAN, M. D.,
LAMONI, IA.

In his address delivered before the Tenth International Congress at Berlin in 1890, Sir Joseph Lister said: "There are few more beautiful things in antiseptic surgery, as contrasted with the results of former practice, than to see the abundant purulent contents of the pleural cavity give place at once to a serous effusion, rapidly diminishing from day to day." At the time when antiseptic surgery was first applied in the treatment of empyemia, its real pathology was entirely unknown. Empiricism led the way to a rational treatment that recent researches have proved to be scientific. Here, as has often been the case, surgery was years in advance of pathology, and theory took the place of the known facts of to-day.

The bacteriological study of empyemia has added much to our knowledge of the etiology, prognosis, and treatment of what was once a very fatal disease. This is not only true of the adult, but of the infant and child. The first attempt to make a complete classification of the different varieties of empyemia from a bacterological standpoint was made by Frankel. It was the result of a series of studies commenced as early as 1886. He made the following divisions: First, those cases in which the etiology is still a matter of speculation; when neither the clinical history nor bacteriological examinations of the purulent exudate give support to any definite theory. In the second group the pneumococcus, or diplococcus pneumoniæ, was found exclusively in pure culture. The pus was thick and adhesive, of a creamy white, greenish, or greenish yellow color. In these cases he considered the pneumococcus of diagnostic significance, as it proves beyond all doubt that the empyemia is sec-

*Read before the Southwestern Medical Society, Osceola, Ia., August 19, 1897.

Digitized by Google

ondary to a pneumonia that exists, or has existed. The third group includes all those cases of a tubercular nature. In these cases the presence of tubercle baccilli is hard to demonstrate, though its absence is no sign that it does not exist, as inoculation of the pus from these cases often produces typical cases of tuberculosis. He came to the conclusion that its absence, so far as stain and culture are concerned, pointed strongly to the tubercular element in the etiology of this form of empyemia. Out of four cases examined by the staining method, the tubercle baccillis was found in only one. Garre and Rosembach, experimenting with the pus of cold abscesses, arrived at the same conclusions. In the fourth group foci of infection were found outside the pleural cavity. He had two such cases, in both of which were found the chain cocci. One followed perforating peritonitis, and the other a retro-pharyngial abscess. He arrived at the following conclusion: First, the presence of the streptococcus pyogenus, or the staphylococcus pyogenus aurius, is not diagnostic, as each may be found in empyemia secondary to pneumonia, or tuberculosis; second, the presence of the diplococcus pneumoniæ shows that pneumonia exists or has existed; third, an exudate that fails to give a positive result, either with stain or culture, is, in all probability, tuberculous. His more recent studies have confirmed these results, as have those of many others.

Koplik, of New York, made a bacteriological study of empyemia in children to ascertain whether the same results might be attained as in the adults. He adopted the plan of Frankel and others. He reported twelve cases in 1890 and three more in 1891. The examination included not only preparations of crude pus on cover glasses, stained and unstained, but plates and cultures were made on different media to establish the bacteriological character of fluids withdrawn. After pure cultures had been obtained injections were made into rabbits, guinea pigs, rats, and mice, the experiments on rabbits giving the most uniform results. The following observations were made. In the pus from the fourteen recorded cases were found the streptococcus pyogenes, the staphylococcus pyogenes aureus, the diplococcus pneumoniæ of Frankel, or as Americans should say, "of Sternburg," and the tubercle baccillis of Koch. In these cases the micro-organisms were found mostly in pure cultures, being seldom associated. The tubercle baccilli were associated, however, with chain cocci. In experimental work the diplococcus pneumoniæ gave the most interesting and instructive results. The injections were made into the pleural cavity, great care being observed not to penetrate lung tissue. After a few days most of the animals took ill and died. A few were sick from the start. Death was preceded by a short period of dispnœa. Autopsies revealed pleuritis, both single and double, though the injection was made into one side. The lungs were only partly hepatized. Pericarditis and peritonitis were generally present. In most cases the spleen was enlarged. Cultures made from the blood, pleuritic and pericardial fluids from these animals invariably gave the diplococcus pneumoniæ, corresponding in every way with that of Frankel. Experiments with the staphylococcus pyogenes aureus gave results identical with those from the same germ cultivated from a furuncle. Negative results were obtained from experiments with the tuberculous pus, as it was contaminated from the first with the streptococcus pyogenes and later with saphrophytes.

These experiments show that the same bacteriological conditions exist both in the child and adult. They also show that the time has come when we should point out its etiology when speaking of empyemia. There are no pathognomic signs and symptoms of empyemia. They are much the same as in subacute pleurisy. Those demanding our special attention are, rapid pulse and breathing, with dispnœa. More or less cough. Pain over the diseased lung. Chills with irregular fever, flushed cheeks, and often copious sweating. Emaciation takes place rapidly. Physical examination shows an immobilized condition of the chest wall over the diseased lung, in contrast with normal respiratory moments on the well side. Vocal fremitus is lost over the effusion. There is flatness on percussion, sharply defined over the fluid, the line of flatness varying with the position of the body. Vocal sounds and the respiratory murmur are partly or entirely obscured according to the amount of exudate. From the above symptomology we can only say positively that there is fluid in the pleural cavity. All these symptoms may be produced by other conditions than suppurative pleurisy. We have in inexploratory puncture a positive means of determining the presence of pus without danger and with little pain. We should never postpone its use when there is the least suspicion of empyemia, as an early diagnosis not only tells us what must be done, but saves delay. The puncture should be made, unless otherwise indicated, at the place where a radical operation will, later, be performed. The needle and chest should be as near asceptic as heat and antiseptics will permit.

In making our prognosis, which means so much to both the patient and his friends, it is of vital importance that we should know the bacteriological character of the exudate, for it has been proven at the bedside, as well as in the laboratory, that where the diplococcus is found in pure culture recovery will follow after the pus has been completely removed, whether by an aspirator or by radical operation. A number of cases are on record where recovery has followed rupture through a bronchus, or a discharge through a fistulous opening. After the pus is removed nature is abundantly able in most cases to absorb the inflammatory products left, the same as in hepatized lung tissue. When the streptococci and the staphylococci are found in the pure culture in the exudate the same favorable prognosis may be given with almost equal assurance. When the empyemia is of a tubercular nature there may be marked improvement after permanent drainage has been established. The pleural cavity may become entirely obliterated and the patient restored to apparently good health. But it is doubtful whether an extensive surface like the

Digitized by Google

pleura, after once having been tubercular, can be restored to its normal condition. There is always danger of a relapse, or an extension to the lungs, or some other organs of the body. Experience has shown that these patients generally succumb in time to general tuberculosis. In the fourth group of cases, where foci are found in other parts of the body, the patients generally die from pyemia.

It is within the power of every practitioner to make a prognosis in these cases from a bacteriological standpoint. With a microscope for bacteriological work, and a text-book, and a little practice, anyone can make such a prognosis in the course of a day or two after pus has been found in the chest.

The treatment of empyemia is surgical. It may be epitomized into—remove the pus. The means for accomplishing this are numberless, but for practical purposes they may be grouped under two heads, viz., aspiration and free incision with drainage.

The operation for opening the chest for empyemia is one of the most ancient in surgery, but the results were so fatal that it was only used in desperate cases till recent times. To American surgery is due the credit of establishing the operation on a sound basis. Bowditch, of Boston, first successfully aspirated the pleural cavity and applied suction to remove its contents. Though the details of this operation have been modified by nearly every surgeon, the fundamental principles remain the same. While many recoveries have followed its use, especially in children, radical operations have yielded the best results by far and should therefore be adopted. The point of election for an incision has varied with operators. John Marshall contended that it should be made immediately opposite and below the junction of the fifth rib with its cartilage. He believed at this place an empyemia would naturally point on account of the comparative absence of superadjacent muscles. Gerster opens in the eighth intercostal space parellel with the ribs and a little back of the axillary line. Senn cuts over the center of the sixth rib on the right side and the seventh on the left side, at a point half way between the nipple and axillary line. Erickson says: "The space between the fifth and sixth ribs, an inch to an inch and a half in front of the mid-axillary line, will probably be found the best in most cases. The interval between the ribs is wide enough here to admit of a large tube readily. The covering of the soft parts is not too thick, and the drainage obtained is efficient, and there is little risk of the opening becoming obstructed, either by the expanding lungs or diaphragm." In case of localized empyemia the opening must be over the collection of pus.

Many able surgeons always resect one or more ribs. Senn says: "Rib resection should always be done in operations for empyemia." Ingals says: "With a single exception I have never found resection necessary." In recent cases, in children especially, an incision between the ribs is generally sufficient. In chronic cases, where the lungs are bound down by adhesion and the ribs are close together, resection of one or more ribs is imperative, and if this fails, it may be necessary to resort to the operation of Eslander or Schede.

Several years ago it was the general custom to irrigate with some antiseptic solution. On account of many grave accidents this practice has become almost obsolete. In the Medical News of January, 1889, Bowditch reports that in 299 operations on 250 patients he found it necessary to wash out the cavity once, and he considers it dangerous.

Free drainage is the prime object in all operations for empyemia. The kind of a tube to be used must be determined in each case by the conditions, but it must be of sufficient size to admit of free escape of the pus. It should always be anchored with a safety pin, as the tube has in a few cases escaped into the pleural cavity, causing much delay and embarrassment to the operator.

The strictest of antisepsis should always be observed, as there is seldom, if ever, infection of the pus with the bacteria of putrefaction at the time of the operation, and this complication should be carefully guarded against during the entire course of treatment. Should it take place, the resulting ptomaines add to the gravity of the case by causing fever and producing pain. I have found antiseptic powders, such as iodoform and boracic acid, valuable agents in destroying these saphrophytes when present. Its free use will rapidly destroy all odor.

In tubercular pleurisy Senn iodoformizes the cavity with a 10 per cent. iodoform emulsion, giving guaiacol internally.

In all these cases special attention should be given to the general health. Our patients should be kept in the open air as much as possible. Animal food should be freely given and such drugs as will aid nature in her fight against the powerful army of micro-organisms.

TREATMENT OF PNEUMONIA.*

By A. B. SOMERS, M. D.,

OMAHA, NEB.,

PHYSICIAN AND SURGEON TO OMAHA & GRANT SMELTING CO.; PHYSICIAN TO ST. JOSEPH HOSPITAL; PROFESSOR OF PRINCIPLES AND PRACTICE OF MEDICINE AND CLINICAL MEDICINE, CREIGHTON MEDICAL COLLEGE.

The total mortality of pneumonia in the United States, according to the census of 1890, approximates 100,000 annually, being a rate of one to 625 inhabitants, this mortality being larger than from any other disease except consumption, and larger that the combined death rate from diphtheria and typhoid fever. The percentage of mortality is larger than any other acute disease, with the possible exception of diphtheria, being given as ranging from 20 per cent. to 40 per cent. of the persons attacked, a percentage that has not materially diminished during the last twenty years, a period when we have been giving a great deal of time and attention to the prevention and treatment of consumption, diarrheal diseases, diphtheria, typhoid fever, and other communicable diseases, with very successful results, both in their prevention and

* Read before the Omaha Medical Society, March 23, 1897.

Digitized by Google

treatment. There are indications that pneumonia is to receive more attention in the near future, judging from several articles which have appeared on the subject during the last few months.

In the Medical Record of September 19, 1893, Dr. McArtney, of Fort Covington, N. Y., in an article on pneumonia, reports a series of 120 cases with a mortality of only two, or 1.66 per cent. Previous to this time his average mortality had been 16 per cent. The distinctive feature of this plan of treatment is, "free and long continued sweating" (twelve to forty-eight hours) by the use of heat, steam, and blankets, not by the use of drugs.

Dr. Simon Baruch, of New York, in the Medical News for January, 1, 1897, recommends a plan of treatment the distinctive feature of which is a wet compress applied to the entire chest, to the waist, and up over the shoulders, by means of a jacket composed of three thicknesses of muslin wrung out of water at a temperature of 60° and covered with a dry flannel, to be changed every half hour until the temperature is reduced to 102° F., and every hour until it is reduced to 99.5° F. He reports that in the Manhattan General Hospital the mortality has been reduced from 37 per cent. to 12 per cent. by this plan of treatment, and that in his private practice he has not lost a single case of uncomplicated croupous pneumonia.

Dr. John Hays, of Philadelphia, in the Medical News of January 23, 1897, gives his plan of treatment, the distinctive feature of which is the local application of ice in bags to the affected area, the period during which the cold is to be applied being determined by the degree of fever present. If the temperature falls to the normal or below and remains there, the cold may be gradually removed. He reports a series of 299 cases with ten deaths, or 3.35 per cent., and a series of 104 cases with three deaths, or 2.88 per cent. I know from my own personal experience that pneumonia is both more prevalent and more fatal in the eastern states than it is in Nebraska, and yet it is sufficiently prevalent and fatal here to arouse our deepest interest in its management. The average mortality from this disease in the city of Omaha for the last six years has been 125, about 55 per cent. of this number being children under five years of age, a death rate of one in 800 or 900 of the population. The most of my experience with pneumonia in Omaha has been as physician for the Omaha & Grant Smelting Company for nine years. The pay roll of this company has averaged about 600 men during these years, and the average number of cases of pneumonia about twenty-five annually. During this entire period there have been only three deaths, only one of which has been during the last five years, and none during the last three years. I have had no case of pneumonia with death in my private practice during the last five years, so that the entire mortality from pneumonia in my experience during this time has been less than 1 per cent. There is no distinctive feature about my method of treatment that I can recommend as such. My aim is to treat the patient rather than the disease.

The most important danger in this disease is failure of right heart, and I believe this to be due either to the effect of toxines or enervation from exhaustion. In a certain number of cases there may be overdistension from blood. My prime objects in treatment are to husband the vital powers, reduce temperature, eliminate toxines, and strengthen the heart. With these objects in view I recommend:

First—Absolute rest in bed, with rest and tranquility of mind, and a maximum amount of sleep. The patient should not be allowed to fret or worry about himself, neither should he be allowed to have his mind occupied by company or items of business or news. He should be made to feel that he is sick and that his only business for the time being is to get well, and of his ultimate recovery he must be made to feel tolerably certain. This is a more difficult part of the treatment many times than the administration of drugs, but it is also more important.

Second—The diet should be wholly liquid and composed almost exclusively of nitrogenous food, milk, cream, buttermilk, and eggs being the chief articles, given in as liberal quantities every two hours as can be digested and assimilated.

Third—I consider it important that the alimentary canal be thoroughly cleared by the use of some of the cathartic drugs very early in the history of the disease and that the bowels be not allowed to remain constipated for a single day during the progress of the disease. For this purpose a moderate dose of calomel, or calomel and soda, is the most effective remedy I know of. I occasionally use a saline instead. This will stimulate the functions of excretion, favor elimination, and assist in the process of digestion and assimilation.

Fourth—Reduce the temperature by the use of cold water externally, internally, and continually. I have tried the wet compress as recommended by Dr. Baruch in only a limited number of cases, but have been highly gratified with the result. Cold sponging of the entire surface is a fairly good substitute and will not meet with so much opposition as a cold pack. The cold water, especially the compress, will relieve pain, reduce temperature, strengthen and lessen the frequency of respiration and pulse beat, and promote elimination by the skin. On the whole I consider the cold water treatment more agreeable and effective than the sweating process as recommended by Dr. McArtney, but much the same results are obtained by the two processes.

Fifth—I know of no drug so important in the treatment of this disease as strychnine begun early and given for the purpose of toning up the nervous system and strengthening the heart. For this purpose I recommend gr. 1-20 every three hours, and increase the frequency of the dose until the pulse beat is reduced below 100 per minute, or the physiological effect of the drug begins to manifest itself. I frequently give strychnine to the amount of one-half grain in twenty-four hours, and never had cause to regret it. In fact, I would not hesitate to give still larger quantities if I failed to get results with this amount. The administration of strychnine to the

Digitized by Google

extent of producing the desired result, namely, strengthening and reduction of frequency of the pulse, is, in my opinion, the most important element in the drug treatment of pneumonia.

Sixth—I use morphine or codeine in moderate doses, as required to relieve pain, produce sleep, quiet superfluous cough, and promote expectoration. I believe that one or the other of these remedies are applicable to any case, and that no other remedy is as good.

Seventh—The use of alcoholic stimulants and digitalis I reserve for emergencies, and under this plan of treatment the emergency very rarely arises. If given at all the alcohol should be given in one-half ounce or one ounce doses, and frequently repeated. The digitalis may be given in much larger doses than usually recommended.

Eighth—If the expectoration is very thick and tenacious the muriate or carbonate of ammonia may be given to liquefy the secretions, but these remedies are severe on the stomach and are rarely needed.

Ninth—In cyanotic conditions, a timely bleeding may relieve an overwhelmed heart and save life, but is very rarely called for. There is nothing in this plan of treatment that is disagreeable to the patient, there are no drugs used that will disagree with the most sensitive stomach, and in my hands it is a grand success as compared with the general plans of treatment that have been in use during the last 25 years.

CONGENITAL TUMOR OF ORBIT—REPORT OF A CASE.

By HENRY D. BOYDEN, M. D.,

GRAND ISLAND, NEB.,

VISITING SURGEON ST. FRANCIS HOSPITAL, MEMBER AMERICAN MEDICAL ASSOCIATION, NEBRASKA STATE MEDICAL SOCIETY, AND NATIONAL ASSOCIATION OF RAILWAY SURGEONS.

I will briefly report a case of a congenital cystic tumor which invaded the orbit of the right eye, causing the displacement of the eye ball as illustrated (Fig. 1). The age of the patient was 8 years, the daughter of a Polish farmer. The eye ball stood out with such prominence that she was kept from school for fear of injury from playmates.

Figure 1.

Examination revealed a soft growth, with no pulsation, but an obscure elasticity, with a history of slow development and of long duration. From the great protrusion of the eye ball there was limitation of movement, the pupil drawn to such an angle that sight was useless. The child was taken to St. Francis Hospital May 21, 1897, duly prepared with special

Figure 2.

reference to antispesis. An incision was made in the inferior cul de sac of the conjunctiva and the tumor carefully extirpated; its attachment was to the posterior portion of the orbit, and so firm that it was found necessary to ligate and cauterize the pedicle. The tumor was smooth, unilocular, and contained an oily or thin fatty substance. Drainage and irrigation were used for a few days after its removal.

Figure 3.

The second illustration (Fig. 2) shows the status of the case at the end of two weeks. A second operation was then performed on the right eye, the internal rectus being divided and the external advanced. Two weeks following this a third operation was performed, the division of the internal rectus of the left eye. The third illustration shows the condition of the patient as she left the hospital, with vision in each eye normal (15-15).

Digitized by Google

SOME REMARKS UPON THE TREATMENT OF CHRONIC SUPPURATION OF THE MIDDLE EAR.*

BY F. S. OWEN, M. D.,
OMAHA, NEB.

There is, perhaps, no disease which more greatly affects the integrity of an important organ, or, indeed, which more greatly jeopardizes the life of the patient, less considered and more neglected, than that of chronic suppuration of the middle ear.

It is still too largely the proverbial opinion of the laity that a discharge from the ear is a condition which must not be interfered with, because of some imagined untoward result which may follow, or which must be patiently endured, since it cannot be cured; or again, which should be lightly considered, as the patient will grow out of it, or, at any rate, it will take care of itself in due time if left alone.

Thus, from one or the other of these reasons maintained by the laity, a very considerable proportion of the cases of chronic suppuration of the middle ear go untreated, or are only treated at irregular and long intervals, and then only when the conditions become severe.

Chronic suppuration of the middle ear is a very common disease in children, and a very considerable proportion of the cases seen in adults originated in childhood. As this disease is a destructive process from beginning to end, it goes without saying that the earlier it is treated the more amenable to treatment it will be. Therefore, it is of the utmost importance that this disease in children should be detected, and early and intelligent treatment given. This is equally important in those cases originating in adult life. Could all such cases receive early and intelligent treatment, our deaf mutes and profoundly deaf would be much fewer in number, and few cases of suppurating ears would continue for the long period of years, or through a lifetime, as they now too often do, entailing, as they do, not only the suffering and annoyance from this condition, but also the great danger to life. The danger to life from a suppurating ear is not always fully appreciated, even by the profession. Greinet and Meier report a mortality of 3½ per cent. out of 345 cases of chronic purulent otitis media. These deaths were from brain abscess, sinus phlebitis, subdural abscess, meningitis, etc.

I do not wish to be understood, by emphasizing the importance of early treatment, that the treatment of the neglected and old-standing cases is any less important. Not only the great majority of these cases could be cured by methodical and persistent treatment, but also the dangers attending them will be reduced to a minimum. The treatment of this disease largely falls to the general practitioner. Comparatively few cases seek the aid of the specialist. The general practitioner should, therefore, not only fully appreciate the gravity of the disease himself, and should treat it with the same care and intelligence he does a fever or other disease, but it is also his bounden duty to educate the laity to a more perfect understanding of its danger, and a better appreciation of the benefits of treatment.

It is not necessary that the physician be an expert otologist to treat chronic purulent otitis media with a large measure of success. While it is proper and best that he be able to make a speculum examination, yet without being able to do so he will not treat it improperly if he will apply the same principles of drainage, asepsis, and topical application that he would for suppuration in any other part of the body, modified and adapted, of course, to the anatomical and pathological conditions of this particular part.

In the treatment of a suppurating ear perfect drainage should receive first consideration. Without it we can hardly expect any cases to recover, but if we secure it many cases will quickly recover without other treatment. Under the most favorable conditions, natural drainage from the ear is very imperfect. We must, therefore, supplement it by artificial means. The proper use of the syringe best subserves this purpose.

As no other part of the treatment is so important and yet so little appreciated as the use of the syringe I trust that a few remarks upon this apparently simple operation will not be out of place. It is little better than useless for the patient to attempt to syringe his own ear, as he is often directed to do. This should only be permissible when no other person is available. Whenever possible, the surgeon should instruct some other member of the family how to carry out every detail of the process of irrigating the ear.

The selection of the proper syringe is of no little importance. A piston syringe with a straight, blunt tip, and holding from two to three ounces, is preferable for ordinary use, though a soft rubber bulb syringe may be advisable in the case of an infant where, by its struggles, an unskilled hand may do injury to the soft parts by the use of the piston syringe. I would also advise the soft rubber bulb for the use of those who must syringe their own ears, for with this, in their ineffectual attempts to irrigate the ear, they can do no possible harm. It is well in giving instructions to remember that the tip of the syringe should be placed within the meatus, and while it is held steadily in place the auricle should be drawn upward, backward, and outward in adults, downward, backward, and outward in infants. The cleansing fluid should be driven in with a moderate amount of force to displace the discharges from the irregularities of the canal and middle ear.

The amount of fluid to be used and the frequency at which irrigation should be repeated depend upon the activity of the process and the severity of the case. In any case it requires not less than six ounces, and frequently as much as a quart or more, to thoroughly remove the discharge. About twelve ounces is perhaps a proper average. The process of irrigation should be repeated sufficiently often in each case to prevent accumulation of the discharge in the canal. In the active and neglected cases this will require irrigation to be repeated as often as every two or three hours. Two or three hours should be the usual inter-

*Read before the Nebraska State Medical Society, Lincoln, May 20, 1897.

Digitized by Google

val for infants. Only in the very mild cases will syringing out the ear twice a day be sufficient. The temperature of the fluid should be about blood heat. Never very cold or very hot.

When irrigation is carried out as above directed, at least in those cases where the greater part of the membrana tympani is absent and there exist no other grave pathological changes in the tympanic cavity to prevent the liquid from reaching every nook of the diseased surface, the drainage thus secured will be sufficient. But since this ideal condition is only met with in a small proportion of cases, we must supplement this by other means.

In all cases inflation, either with the Politzer bag or by Valsalva's method, is an important means of freeing the middle ear of discharge, and especially is it indispensable in those cases where the perforation is too small or unfavorably situated, so that the fluid from the syringe is prevented from reaching and thoroughly cleansing the cavity of the middle ear. Each time the ear is irrigated with the syringe the physician should inflate it with the Politzer bag, or direct the patient to do so by Valsalva's method, two or three times, after which remove the secretion which has by this act been driven from the middle ear and Eustachian tube into the external meatus by further syringing.

In the favorable cases, with the drainage easily maintained, to effect a cure is practically an easy matter. The difficulties to overcome, however, before perfect drainage can be secured in a very considerable portion of neglected cases is not so simple a matter. Thus, the secretions may be retained in the middle ear by the growth of aspergilli in the canal, the development of polypi and granulating tissue in the middle ear, or the formation of a cholesteatoma; or they may be confined by too small perforation in the membrana tympani, or by bands of cicatricial tissue, masses of necrotic tissues, etc., all of which must be removed or relieved before drainage can be secured and a cure reasonably hoped for. To go into the management of these various obstructive lesions, as tempting as the field may be, would take me beyond the object of this paper. In passing I will say, however, that the surgeon should not lightly undertake operative procedures for the relief of these conditions. Unless he is able by speculum examination to ascertain the exact nature of these various conditions, he had better content himself with efforts of maintaining as perfect drainage and asepsis as possible, and with the use of such topical applications as may be indicated. By this practical means, sedulously carried out, the graver complication at least will be averted, and not a few of these otherwise hopeless cases will go on to permanent recovery.

It must not be forgotten that the application of the principles of asepsis is as important in the treatment of suppurating process in the ear as elsewhere. First, the water used for daily cleansing the ear, either by the physician or patient, should be rendered aseptic by boiling, or antiseptic by the addition of one or the other of the antiseptics in common use. Of the several antiseptics in use, for cheapness and convenience, as well as for effectiveness, either bichloride of mercury or carbolic acid are to be recommended. I prefer the bichloride of mercury and prescribe it in tablet form, each tablet containing gr. 1.82 of the bichloride, which, when dissolved in a pint of water, gives a solution of 1 to 4,000, an efficient strength for antiseptic purposes.

The bichloride solution is not to be recommended for use in children, nor in those cases in adults where the fluid finds it way into the throat. Instead of the bichloride solution in these cases I employ a 1 or 2 per cent. solution of carbolic acid or a saturated solution of boracic acid.

It is needless to mention that the fluid which has once been injected into the ear should never be reinjected; that the hands, the syringe, and all instruments used should be surgically clean. Indeed, to secure the largest measure of success the most careful antiseptic precaution is necessary. Unfortunately, it is not possible to attain this when much of the treatment must be carried out by the patient or some member of his family, but if the surgeon will take the trouble to give practical and careful instructions, a fairly aspetic condition can be maintained.

The next step after thoroughly cleansing with the syringe is to dry the parts carefully with absorbent cotton. This will have to be omitted when the treatment is carried out at home by members of the family. Some antiseptic medicament is then to be applied. This may be either in fluid or powdered form.

Of the solutions used for this purpose the most efficacious are the alcoholic. Among them may be mentioned:

1. Boracic acid 8 parts, water and alcohol each 100 parts.
2. Bichloride of mercury 1 part, water and alcohol each 2,000 parts.
3. Carbolic acid 4 parts, water and alcohol each 100 parts.
4. Salicylic acid 4 parts, water and alcohol each 100 parts.

The above are the most useful combinations. Many others of less importance might be added to the list. The ratio of the alcohol to the water may be increased or diminished as deemed necessary.

Of any of these medicaments fifteen to twenty drops should be warmed and instilled into the ear, as a rule, twice a day, after cleansing as above directed. The solution should remain in the ear for at least ten minutes. This is done by directing the patient to recline the head to the opposite side. It will often be found that alcoholic solutions cannot be borne. Especially is this true of the alcoholic solution of the salicylic acid. In this case an aqueous solution should be used alone, or one of the antiseptic powders instead. The mst useful of these powders are aristol, acetanilid, boracic acid, and iodoform. These powders must be used with some degree of care, especially where the patient is not under observation. They should never be trusted to the patient's hands, and the surgeon should use just sufficient powder by insufflation to

Digitized by Google

cover the membrane with a thin coating, lest the powder form an impacted lump in the meatus externa, and dangerous conditions result from the pent-up discharge.

For the past year and a half, in those cases where the membrane is entirely gone or there exists a large perforation, I have employed a powder composed of equal parts of stearate of zinc and finely powdered boracic acid, and have found it very efficient in stopping the discharge.

To promote drainage and to maintain asepsis, strips of iodoform gauze packed into the canal as far as the membrana tympani have been used very largely in the past few years. For obvious reasons this procedure cannot be recommended in those cases where the patient cannot be seen daily. For similar reasons, the common custom of wearing a cotton plug in the ear should be strongly interdicted.

In this connection I cannot forbear mentioning the too strong reliance placed by some upon the instillation of a few drops of solution containing peroxide of hydrogen or pyrozone, without the employment of other means to promote asepsis and the healing process. Certainly a canal about an inch in length, full of pus and dried secretions, cannot be rendered aseptic by the careless injection by the patient of a few drops of these medicaments. Two years ago I discontinued the employment of peroxide of hydrogen in chronic aural suppuration, not only because in my judgment other means were superior in all cases, but also because it was unsuitable and even harmful in many cases.

In the treatment of chronic suppuration of the middle ear the importance of the naso-pharynx as a causative factor of middle ear disease, and a means of continuing the process by supplying constant infection, must not be lost sight of.

The nasal cavity should be carefully searched for disease, and if found should receive due attention. This applies specially to obstructive conditions, and of these adenoid vegetations hold first place. Indeed, they are responsible for the deafness met with in the majority of all instances, whether in adult life or in childhood, and when found should be summarily dealt with. Treatment of diseased conditions of upper air passages should never be omitted, and if crusts and discharges of pus or muco-pus are present in the nose or naso-pharynx, the most careful antiseptic precaution is necessary in order to secure success in the treatment of all chronic otorrheas.

Many other remedies and modes of treatment which are in common use might be mentioned, but to do so would extend this paper beyond the time allotted.

The facts to which I have endeavored to draw particular attention are those which are of special importance, not to the skilled otologist, but to the men who are engaged in general practice. And the treatment which I have endeavored to outline in as clear and concise a manner as possible, is offered as the most efficient and practical for those who cannot give this disease special attention.

CREDULITY and superstition are first cousins.

"EYELID SYMPTOMS IN GRAVES' DISEASE."—In a recent number of the Edinburgh Medical Journal Mr. Arthur Maude has published an interesting and suggestive paper on this subject. The two chief abnormal variations in movements of the eyelid are von Graefe's sign—the eyelid descending not synchronously with the descending globe, but more slowly, and, it may be, more jerkily, and Stellwag's sign, consisting in retraction of lids and consequent increase in the width of the palpebral fissure. This retraction is most obvious in the upper lids and is frequently associated, as is seen when the patient's gaze is directed downwards, with a cupping of the lower lid. Both these signs are quite independent of exophthalmos, and their clinical value is difficult to estimate. They are neither constant nor pathognomonic, and are variable even in the same individual. Von Graefe ascribed the deranged movement to spasm of the fibres of Muller. More recently Ferri has advanced the theory that the retraction of the lid is the result of the mechanical shortening of the levator palpebræ, due to the increased volume of blood vessels distributed in its substance. Mr. Maude is of opinion that such an explanation might be true in a few outstanding cases, but could scarcely be so in all. Two theories are open as an explanation, viz., that the conditions are due to spasm of the raising muscles or to paresis of the orbicularis. That irritation of the sympathetic can produce retraction of the lids was shown by Remak's experiment, and is further demonstrated by the action of cocaine as an irritant of the terminations of the sympathetic. Two difficulties present themselves with regard to accepting irritation of the sympathetic as an explanation, first, that this irritation does not affect the iris or ciliary muscle, both of which react very readily to external stimuli, and secondly, that the phenomena of retraction of the lid and impaired movement, although often variable, may be constant for long periods—a condition scarcely likely to be the result of irritation. On the other hand, it is stated that there is direct evidence that paresis of the orbicularis and other upper facial muscles is almost constant in Graves' disease. This group of muscles, as regards its nervous supply, is closely connected with the oculomotor nucleus, and it would thus seem that the eyelid symptoms in this disease are intimately associated with changes in the third nerve nucleus. Mr. Maude's paper, it will be seen, gives an interesting and comprehensive statement of the varying explanations offered in reference to the movements of the eyelids, and he himself evidently leans to the last mentioned theory, viz., an affection of the oculomotor nucleus and a consequent paresis of the upper facial group of muscles. But it might be objected to such an explanation that if, as is stated, this group of muscles is almost constantly weak, the movements of the lids should also be constant, and, as is well known, this is by no means the case, so that perhaps a satisfactory explanation for all cases is not yet forthcoming.—Lancet, August 28.

HASTE to be rich brings more gray hairs and makes more wrinkles nowadays than illness or age.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$1 00
Single copies..... 10

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, OCTOBER 15, 1897.

THE DOCTOR IN POLITICS.

At the meeting of the Mississippi Valley Medical Association at Louisville, just closed, Dr. John Punton, of Kansas City, struck the keynote of the hour in his address on "The Growing Need of Medical-Political Organization." He said that he was aware that there are those in our profession who shrink at the thought of combining medicine and politics, but that there never was a time in the history of medicine when such a nauseating mixture was so urgently needed. And he is right. We have urged before in these columns the necessity of banding together for political—not partisan— purposes. Dr. Punton asks: "But cannot the individual members which constitute the medical profession exert their influence to bring about such reforms without actually becoming politicians? In other words, is it necessary for us to concentrate our forces by the formation of a medical political organization?" And he answers the question by saying that it is impossible short of thorough organization. "United we stand, divided we fall" is as true in this case as in any other. While we are quibbling over some petty jealousies or ethical error, the organized empiric forces, already in the field, conquer in every contest and reign supreme.

In this day of trusts, combinations, and organization the individual is a nonentity. Every branch of labor, every department of business, and practically every interest is united, and working for the good of itself. And thus united these bodies are a power that the politician respects. And the only logical resource for the medical profession is to do the same, distasteful as it may be.

RICHET ON PASTEUR.

Prof. Charles Richet in his address on Pasteur before the British Medical Association, at the Montreal meeting, made a plea for a fuller recognition by the medical profession of the ancillary sciences than has hitherto been granted, especially of physics, chemistry, and physiology. The importance of this was illustrated by reference to the Roentgen rays, fermentation as studied by Pasteur, as a chemist, and the experimental work done by himself and other physiologists in developing serum therapeutics.

It is the knowledge gained by experiment to which medicine owes her greatest progress, and bedside observation is only supplemental to the knowledge acquired in the laboratory. This view seems a just one, for in keenness of observation what advantage do we enjoy over Hippocrates and his school? It has been pointed out in the REVIEW that the experimental methods of the laboratories had somewhat dwarfed clinical observation, which, after all, is more a characteristic of the individual doctor and appertains more to the art than to the science of medicine. Both should have their fullest exercise. But the latter is greatly underestimated by the speaker, who, as an experimental physiologist, has no knowledge and no just appreciation of the practical side of medicine.

The work of Pasteur was presented as an example of what had been accomplished by experimental science. Professor Richet said:

"I shall not be contradicted when I say that the value of this work is greater than all that the history of medicine has given us since the commencement of our era. Through his labors everything has been renewed, regenerated, and, thanks to him, medicine has made more progress in twenty years than had been made previously in twenty centuries."

It was by laboratory experiments that the great savant discovered that fermentation is caused by organic bodies, and that boiling sterilized liquids. It is hard to realize that the great fact of the generation of germs was absolutely unknown before Pasteur.

"Gentlemen, let us not be ungrateful; let us remember that the recognition of the real cause of all fermentation (the development and germination of organized elements) dates from 1857 and from the celebrated memoir of Pasteur upon lactic fermentation. A new world has been opened to science."

Although this was one of the fundamental discoveries of the century, it was received without demonstrations of joy, because its great importance was not comprehended, even by the discoverer himself. But it was the beginning of the study of living organisms, and ten years later was published to the world the part they play in the disease of the silkworm.

"Thus, by successive steps, did the work of Pasteur develop in all its greatness and logic. In the first place, in order to elucidate a chemical problem, he studied tartaric fermentation, then he was led to study lactic fermentation, and he showed that they were biological phenomena. He then pursued the analysis

Digitized by Google

of this phenomena with all its consequences and was led to the conception that disease was due to the development of a parasite.

"The normal living being follows out its course of growth without the development of any organic parasite in its tissues or in its humors. But if these humors or tissues happen to be inoculated with an organism capable of developing, then this small living thing multiplies, is the higher organism infected and the whole body becomes as it were a culture fluid, in which the pathogenic microbe propagates itself, a center of infection which scatters the disease by sowing the noxious germs wherever it goes. Thus arose the new conception, profoundly new not only for medicine but for hygiene—Disease is parasitism. From thenceforth we understood the meaning of the words 'infection' and 'contagion,' previously mysterious."

Of course Pasteur did not find out all that is known of contagious dieases, but he was the first to point out that infection was a phenomenon of microbial parasitism. The way having been indicated, it was not so difficult for others to travel farther until sufficient data had accumulated for the generalizing mind of Lister to make it the greatest factor in modern surgery.

Professor Richet insisted that Koch has only improved the technique and elaborated details; that he has done nothing new; all that is essential came from Pasteur; and that it is his work that has revolutionized medicine.

Books written twenty years ago belong completely to another era; their pathology, etiology, prophylaxis, and treatment seem strangely antiquated. They are no longer medicine. They are the history of medicine.

Medicine is now in a transitional state, and this transition is visible in every quarter. The avalanche that has been accumulating for generations has broken loose and rushes onward with incredible speed and irresistible force.

The speaker claims that the culminating point in Pasteur's career was his principle of vaccination, by which the animal economy may be rendered immune to disease, and adds:

"Fermentation, infection, contagion, vaccination; here in four words we have the work of Pasteur. What more need I say? Do not these four words possess, in their simplicity, unequalled eloquence?"

Purulent infection, hospital erysipelas, puerperal infection were scourges before Pasteur that claimed their thousands of victims annually. These are now only historic memories. A sad history, it is true, but one that illustrates what science can do for medicine. The speaker here introduced a reminiscence:

"When, on the occasion of his jubilee, a great celebration was prepared for Pasteur in the Sorbonne, in the presence of the leading men of science of the world, there was a moment when all hearts were softened—the moment when the great surgeon who was the first to perceive how to apply to the practice of his art the theory of pathogenic parasites, when Lord Lister drew near to Pasteur and gave him a fraternal embrace. These two great benefactors of humanity, united in their common work, afforded a spectacle never to be forgotten, a striking reconciliation of medicine with science."

Notes and News.

MORPHINE can be detected in the urine if the daily use exceeds 10 ctg.

DR. J. P. GILLIGAN, of O'Neill, was married October 5 to Miss Maud Stout, of Tekamah.

DR. R. C. MCDONALD has resumed his practice in Fremont after an absence of about two years.

THE latest form of insurance is a policy to insure women against twins, triplets, and death in childbearing.

ONE physician in every 2,000 commits suicide annually. In other words, one physician in every fifty who die commits suicide.

A BUTCHER was recently arrested in Liverpool, England, for selling beef of cattle killed by lightning, the meat being unfit for food.

A. C. STOKES, M. S., from the University of Chicago, has located in Omaha and will fill the chair of Chemistry in the Omaha Medical College.

THE Columbus Medical Journal startles the profession with the statement that a sure preventive for gonorrhea is to observe the seventh commandment.

DR. J. M. EMMERT, of Atlantic, and Dr. B. H. Criley, of Dallas Center, have been nominated for the senate of Iowa. Dr. H. D. Bowen, of Allamake, has been nominated for the house.

To prevent sleep walking an excellent remedy is suggested by one of our contemporaries. It is to scatter carpet tacks on the floor, with their business ends pointed heavenward.

DR. A. W. SHERMAN, of Lamoni, Ia., has sold his practice to Dr. A. E. Derwent, of Elma, Ia. Dr. Sherman expects to spend a year in post-graduate work, making surgery his special study.

DR. G. W. STROUGH has changed his location from Pickrell, Neb., to Hickman, Neb. Dr. M. B. Newhouse, who has practiced in Hickman for some years, has gone to Magnetic Springs, Ohio.

THE Kansas State Board of Health organized by electing Dr. E. M. Hoover, of Halstead, president, and H. Z. Gill, of Pittsburg, secretary. The latter has issued a circular pertaining to typhoid fever.

THE editor of the Southwestern Medical Record advises physicians to stop protesting against the starting up of new medical colleges, and in place of it get out an injunction in the United States court.

Digitized by Google

The outcome of the fight against Dr. C. P. Fall, superintendent of the Institute for Feeble Minded at Beatrice, Neb., is that Dr. Fall has resigned, and Dr. C. G. Sprague, of Omaha, has been appointed in his place. Dr. Sprague is a homeopath.

From reports Prof. Senn was "in the swim" at Moscow, receiving at one time, after making an address, an ovation accorded to none others. The czar invited him to make his residence in the Kremlin during his stay, as an imperial guest.

Dr. A. S. Holladay, of Brownville, Neb., died October 9. Dr. Holladay went to Brownville forty-two years ago, and was the first physician in that part of the state. He has not practiced medicine for many years, devoting his time to the breeding of fast horses.

The Daily Lancet is now controlled and published by the Bailey and Fairchild Company, New York, and edited by Dr. Joseph F. Edwards, of Philadelphia. There is quite an improvement in general character and tone of the Lancet since it came under the present management.

It is reported in France that the late Sir Joseph Gholozan's death was caused by poison purposely administered. He was the trusted physician of the late shah of Persia, and knew court secrets, which made his presence on earth undesirable. His predecessor was also poisoned.

Mr. Ernest Hart, the well-known medical writer and editor of the British Medical Journal, recently passed through the ordeal of having one of his legs amputated. Some necrosis of the bones of the foot supervened upon an ulceration, doubtless associated with glycosuria, and finally it was found necessary to sacrifice part of the leg.

Our colored friends are trying to keep up with the times. During the exposition held in Atlanta last year they met together and organized the American Medical Association of Colored Physicians, and the second meeting of this association takes place to-day and to-morrow, October 15th and 16th, in Nashville, Tenn. They claim a membership of about four hundred.

The Canadian Practitioner devotes its September number to Lister and Listerism. It is a graceful tribute to a great man, and is a credit to the journal itself. All Americans, and all peoples for that matter, can join heartily in the sentiment expressed by one of the writers when he says: "We admire him for the great work he has done for the human race. We love him for his kindly manner. We also respect him as a hero among men."

The Hahnemann Hospital College of San Francisco recently petitioned the board of regents of the University of California to allow the college to affiliate with the university. By a vote of 14 to 4 the regents denied the application. The faculty of the medical department (regular) now connected with the university protested against the university recognizing medical sectarianism in a well-worded protest, full of sound logic and common sense.

The profession at Nebraska City is to be congratulated on the way it took up the case of the advertising doctor, McChesney. The physicians of North Platte, too, showed that they are not backward in doing their duty, and while they were beaten in the Thorp case, they have not yet given up the fight on his partner. If the physicians all over the state would realize that it must depend on them to see that our present law is enforced, Nebraska would soon be rid of the frauds, quacks, and charlatans that are continually forcing themselves among us.

In Buenos Ayres there is one physician to each thousand inhabitants. Medical students have increased to such an extent that there has been a movement started to close the medical schools for a period of five years so that the profession shall not be crowded. In the United States there is one physician to about every 500 inhabitants, and with enough medical students to double the number of physicians during the next eight years. There is, however, no movement on foot to close the medical colleges, but there are several movements on foot to start new ones.

The Chicago Medical Society has at last secured a permanent home, having leased over 2,000 square feet of space on the fourth floor of the new Stewart building, corner of Washington and State streets. The society's headquarters consist of a hall for meetings, reading and cloak rooms, toilet facilities, telephone, etc. A library of current medical literature, standard works, and the medical journals of the day will be an attraction for members and their friends. The rooms are open from 9 in the morning till 6 in the evening. The Western Medical Review will be one of the journals on file.

The board of regents of the State Agricultural College of Kansas has discovered that the domestic animals at the college farm are not only infected with tuberculosis, but that the disease has been communicated to many of the attendants in charge. The infection has brought three of those who reside on the farm to death's door. Orders have been given for the slaughter of the infected animals, and for post-mortem examinations. That such a state of affairs should be allowed to develop in an institution devoted to the teaching of scientific farming must bring humiliating reflections upon its sponsors.

The editor of the National Medical Review, in an editorial on the oversupply of doctors, medical students, and medical colleges, says this to the students themselves: "Dear boys and girls, go home. You of the 25,000 medical students now filling our colleges, be good and go home. Help your father on the farm or in the store, and your mother in the house, and your chances of happiness and success will be increased a thousand fold. There is sufficient supply of 'raw material' on hand to last the market for at least ten years." But the trouble is the "dear boys and girls" will not read this till too late.

The American Medico-Surgical Bulletin seems to be worried because the British Medical Association had fixed a plac of meeting for 1898 before the meeting in

Digitized by Google

Montreal. It thinks that this method would not work in the A. M. A. But it is doubtful if it would not be much better to have a "council" attend to all the business of the association, elect officers, etc., rather than have the whole body attend to it. Practically the most important business, that of electing officers and deciding on a place of meeting, is done by a committee made up of one from each state, and the report of this committee is usually adopted. This method differs but slightly from that of the British Medical Association, except that all business is transacted by the committee or "council." In this instance the meeting of the council was held in England, three weeks before the meeting of the main body, so that members of the council could attend the meeting at Montreal.

"A Chance for a Scrap.—According to the catalogue of the Denver Medical College there are sixty-one teachers with fifty-one students. Of the teachers, there are thirty-eight with the title of professor after the name. Less than one student for each teacher. The Gross Medical is not very much better off. Their catalogue shows forty-nine teachers; of these twenty-nine hold the title of professor. There are seventy-three students. There is one student for each teacher, but this leaves a surplus of twenty-four to be divided among the fifty on the second round. The regular teachers in the Denver Medical will have perhaps one student each if the dead timber in the faculty will be generous. There are at least sixteen professors who act, practically, as figure heads in the Denver school. Subtracting these, there would be a student for each of the remainder, with a bite over. The Gross faculty seems to contain but very little, if any, dead timber; in fact, rumor has it that the Gross has very little use for dead wood, as it has nothing to burn, and drones are not tolerated in the school, either in the faculty or among the students."

The above is an editorial from the Denver Medical Times. Brother T. H. Hawkins, M. D., LL. D., is the editor and is also president of Gross Medical College. Probably if we heard from the other side there would be a chance for a scrap. In the advertising pages of the Times, the announcement of the college contains fifty-one names, and this does not include the janitor, but it does include an emeritus professor. One hundred and twelve teachers and 124 students, then, is evidently the status of things in medical education in Denver.

Correspondence.

"SHALL WE LET DOWN THE BARS?"

Editor Western Medical Review: Under the above caption in your last issue (September) is an article by "Regular," in answer to which I wish to make a few observations. While I have not the slightest fears of anything of the kind ever coming to pass in the Nebraska State Medical Society, a little wholesome ventilation of the subject may not come amiss. In the first place, with the present and recent past enlightenment upon the subject of medicine, there is but little excuse for the intelligent student to enter an irregular school. And now that the Association of Medical Colleges has passed a resolution giving full credit for their time to all such students and graduates, there is absolutely no excuse for anyone who is a true student and wishes to become a true physician to graduate other than regular. And those who have graduated otherwise within the last ten years have been actuated by one of two motives; they either have sublime faith in their chosen dogma, or they believe it offers better opportunities for financial success than does the "old school," either one of which, for obvious reasons, should be all sufficient to bar them from membership in an organization whose chief object is the advancement of true science in all that pertains to the healing art. Although somewhat problematic, I grant that there may be a few irregular physicians in the state to-day whose reading since graduation has been such (for they must read something) as to give them a passable knowledge of regular therapeutics, and whose mingling with regular physicians has created within them a desire to be considered (sometimes) as near regular physicians as it is possible for them to be without taking the time and trouble, or incurring the expense to go and graduate regular. The same might be said of some osteopaths, midwives, and barbers,—and where would we draw the line? Quoting "Regular," "A physician educated in a legally chartered college and recognized as a physician by the laws of the land, is refused admittance to our societies because he was educated at a homeopathic or eclectic school." By this he virtually says that any legally qualified physician should be eligible to membership provided he would vocalize a little breath to the effect that he renounced his "sectarian beliefs." That would be liberal indeed; but let me remind you, Dr. Regular, that the graduates of Doctor (?) Still, of Kirkville, came within one of being legally qualified to practice their what-you-may-call-it in the great state of Illinois, and is it not likely that there are some "liberal educated" men among them? Besides, what right has a "homeo" to practice regular medicine or anything else outside of that for which his diploma proclaims him to be qualified? Of course, there is no such thing in existence, except the name, as a homeopathic physician, but it would be one of the most difficult things in the world to convince the laity of this fact, and these "both ways" fellows know this, hence the trade mark; and the formal renunciation of "sectarian beliefs" would no more make an honest physician of the average "homeo" than would the placing of a mastiff's collar around the neck of a mongrel cur make a noble canine of the latter. I use the term honest advisedly, for I claim that no one who possesses sufficient intelligence to acquire an education can be honest and claim to practice homeopathy; and for the Nebraska State Medical Society to admit irregulars on any kind of terms would be virutally saying, "We do not believe in higher education"; "the four years' course is unnecessary"; "similia similibus and infinitesimal training is amply sufficient." "In fact, so great is the wisdom of

Digitized by Google

those fellows who practice 'both ways' that we must have them with us," and to get them we have altered our constitution and by-laws, renounced our allegiance to A. M. A., abolished the code of ethics, in short, discarded one of our most sacred principles, and now we stand holding out our hands and saying pleadingly "come." "All you have to do is to declare that you are as good 'allopaths' as the sun ever shone upon, and we are ready to welcome you into full fellowship side by side with the four years' regular graduate, and the battle-scarred veteran whose head has grown white in the service of an organization which has labored for more than a quarter of a century for the advancement of rational medicine, and to obtain for it proper recognition and due appreciation by its ultimate beneficiaries, the intelligent laity." Can we hope to accomplish this by giving our sanction to that which "Regular" advocates? I for one sincerely hope that the Nebraska State Medical Society will never again be humiliated to the extent of having to vote down such a resolution as he says he has been brought before it two or three times and voted down without discussion. But should he see fit to introduce the resolution again, I have faith enough in an overwhelming majority of our members to feel sure sure it will meet the same fate every time it is brought before the society.

I enclose my card and subscribe myself,

Respectfully yours, More Regular.

AN ECLECTIC REPLIES.

Editor Western Medical Review: In your esteemed journal for September a very sensible man, signing himself "Regular," writes a very sensible letter, and very intelligently and plainly brings up a vital subject for the medical world of America to seriously consider. If all doctors of the different "schools" so thoroughly understood the condition of affairs medical as does "Regular" how bright and pleasant it would be for us all. My medical education and experience has been independent of any one particular school or system of practice, and I have been governed by the idea that there was "good" in all three of them, and have acted accordingly. This gives me good grounds for the remarks I may make and the position I take on the subject under discussion. I do not know that I have particularly ever suffered socially or professionally from being classed among the "irregulars," so I have no ax to grind. Our "Regular" brother informs your readers that the Association of Medical Colleges, at its last meeting in Philadelphia, passed a resolution to the effect that graduates and students of homeopathic and eclectic medical colleges would be given full credit for such time as they may have put in at these colleges should they want to complete their course in a "regular" college. This is as it should be, and it is patent that such a radical concession was made by the association only after a thorough investigation of the curriculum and standing of the other schools, and we, as eclectics, should feel complimented by the respect and consideration thus shown us. "Regular" also says, "the time is probably not ripe yet, but it is not far off, when another barrier will be broken down that is keeping many a physician in the sectarian ranks who would gladly leave them if he could. That barrier is the one which our societies have the power to remove."

I might add that the time is ripe for all barriers to be removed as far as societies are concerned; but I do not know so well that members of the eclectic societies especially, would be so truly glad to leave them and lose themselves entirely. While retaining membership in our own societies I am sure we would not resent the hand of good-fellowship offered us, and appreciate the compliment; and signify our willingness to accept concessions and courtesies with the same spirit and dignity that one honorable independent body can offer them to another equally independent one, and I again say that the time is ripe, and for the welfare of medicine in this United States of ours, this question should be properly taken up by all concerned and honorably disposed of, as it should and could be, by developing a harmonious medical brotherhood. Marshall B. Ketchum, M. D.,

Member Neb. State Eclectic Medical Association.

A HOMEOPATH REPLIES.

Editor Western Medical Review: I read with no small amount of interest the communication by "Regular" on "Shall We Let Down the Bars?" I think his suggestions are just for those who wish to change. But of what shall that change consist seems to be an unsettled question. There is a wide range of difference of practice in the homeopathic ranks, whose members, for short, are called low or high potency men. The practice of the low potency men is but a modified regular practice, and these are the only ones likely to ask admission into the societies of regular practitioners. In general, you will find the average sectarian physician will compare favorably with the average regular in all branches of medicine, and will differ but little in anything but his materia medica. The homeopath, especially, has an entirely different method of getting at a prescription than a regular. It is here where his radical change must be made. He finds when he gets into practice that after years spent in memorizing meaningless symptoms he is illy equipped to cope with the thousand little emergencies that arise, and after applying his well selected remedy it fails him, and he finds he must resort to so-called expediencies, or a better term, "rational" medicine. It is right here the homeopath of principle feels his mistake. He must either sail under false colors, or "come out from among them" and unite with a class of men who are broader gauged. If the bars are up until he gets a regular diploma, circumstances may deprive him of that, and he goes along through life feeling he don't belong anywhere. He has no one to sympathize with him. He is ostracised by the regulars and in ill favor with the homeopaths. Now that our friend "Regular" has set the ball rolling, he has thrown a ray of hope our way. I would add one suggestion to Regular's suggestions, and that is, subject

Digitized by Google

every applicant from a sectarian school to an examination in materia medica and therapeutics, and if his diploma is from a college whose other teachings are equal to the requirements from other members of the society, and he will withdraw from all sectarian societies, then admit him. Many of the sectarian physicians have taken post-graduate courses in a regular school, which should have an influence in their favor for joining a regular society. AT THE BARS.

This writer is personally well known by the editor, lives in an adjoining state, and only a little while ago held an office in the homeopathic state society of his state. In a private letter to the editor he says: "This subject always brings up serious thoughts with me, as well as many a heart ache. I would be willing to sink all I have and begin anew to be graduated from a first-class regular medical college, and yet I do not want my family to suffer the necessary privation. * * * My lack of confidence in homeopathy makes it hard to stimulate confidence in others."

"HOSPITAL ENTERPRISE."

The following letter to the Medical Record, apropos of our editorial on "Who Are to Blame for Hospital Abuse?" in the last number of the REVIEW explains itself:

To the Editor of the Medical Record—SIR: The undersigned physicians and surgeons, constituting the medical and surgical staff of the Omaha Methodist Hospital and Deaconess' Home, wish to state, in reference to an item in the Medical Record for August 28, 1897, under the title "Hospital Enterprise," that they are in no way responsible, directly or indirectly, for the appearance of the circular referred to in said item. Said circular was prepared by a member of the board of trustees, and by them ordered to be mailed to every Methodist minister within a certain radius of Omaha, without consulting with or the knowledge of any member of the staff. The clerk, in accordance with her instructions, began mailing the circular, when accidently a member of the attending staff discovered the nature of the mail matter, and after his remonstrance, and after only a small number had been mailed, its further distribution was promptly discontinued and the remainder destroyed.

We therefore desire, in the most public manner possible, to express our most emphatic disapproval of said circular.

W. O. BRIDGES, M. D.
HAROLD GIFFORD, M. D.
A. F. JONAS, M. D.
W. S. GIBBS, M. D.
J. M. AIKIN, M. D.

A CORRESPONDENT with etymological proclivities writes: "The ending oma means tumor, as in adenoma, sarcoma, etc; the prefix dipl means double, as in diplacusis, diplococcus, etc.; therefore, when a graduate receives his diploma does he get a double tumor?" To some extent, yes; usually it is a case of swelled head and general inflation.—Medical Record.

Society Proceedings.

THE York County Medical Society will meet at York Tuesday, November 2. Several papers are promised and a good meeting is expected.

THE first meeting, after the summer vacation, of the Lincoln Medical Society was held at the residence of Dr. M. H. Garten. Dr. W. D. Jones, of Rising City, read an excellent paper on the "Antitoxin Treatment of Diphtheria," which will be published in the REVIEW. An interesting and instructive discussion followed the reading of the paper. After the meeting adjourned refreshments were served and a social time enjoyed.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

The meeting of the above society just held at Louisville, Ky., was a most interesting one and was well attended. The next meeting is to be held on the second Tuesday in November, 1898, at Nashville, Tenn. The following officers were elected: John Young Brown, of St. Louis, president; C. P. Buckman, Fort Wayne, Ind., first vice president; Q. J. Ochsner, of Chicago, second vice president; Henry E. Tuley, of Louisville, Ky., secretary.

ELKHORN VALLEY MEDICAL SOCIETY.

The regular fall meeting of the Elkhorn Valley Medical Society was held at the Oxnard hotel, Norfolk, October 5. About twenty members were present.

The new members elected were Dr. J. E. Summers, Jr., Omaha, and A. L. Muirhead, Winside.

The session was a very interesting one, as the following titles of papers read will show: "Treatment of Abortion," Dr. A. E. Scofield, Tilden; "Septicemia Following Abortion," Dr. A. B. Cherry, Winside; Aseptic and Elective Obstacles," Dr. E. W. Minton, Oakdale; "Remarks on the Diagnosis of Ruptured Tubal Pregnancy, with Report of Two Cases," Dr. F. A. Long, Madison; "A Case of Chronic Glanders," Dr. E. W. Minton, Oakdale;" A Fetal Monstrosity, with Multiform Defects," Dr. F. A. Long, Madison.

The papers were vigorously discussed, but we are unable to furnish report of discussions. Dr. J. E. Summers' presence and part taken in the discussion added much to the interest of the session. The papers will appear in the REVIEW later.

MISSOURI VALLEY MEDICAL SOCIETY.

The above society convened in the United States court room, Council Bluffs, September 16, Dr. H. B. Lowry, president, in the chair. A discussion took place during the business meeting, relative to making changes in the by-laws, so that the annual dues be reduced to one dollar, the same as it was during the early history of the society; that the annual fall meeting should not be held in the same city each year, and that the banquet be done away with. A committee consisting of Drs. Lacey, Thomas, and the secretary,

Digitized by Google

all of Council Bluffs, was appointed to revise the by-laws, especially as regards these matters, and report next year.

Dr. S. R. Towne, of Omaha, read a paper on "School Hygiene," which will appear in next issue. "Notes on Clinical Surgery," by Dr. J. E. Summers, Jr., of Omaha, elicited considerable discussion, as did the paper of Dr. F. S. Thomas, of Council Bluffs, on "Professional Degeneracy." The paper will be found on page 290 of this issue. Dr. R. D. Mason, of Missouri Valley, Ia., read a paper on "The Injection Method of Treating Internal Hemorrhoids." See page 288. "Dementia in Its Clinical Aspects," by Dr. Mary Strong, of Omaha, elicited considerable discussion. This paper will appear in the next number of the Western Medical Review. Dr. H. Gifford, of Omaha, read a very interesting paper on some "Experiments in the Disinfection of the Lid-Borders and the Conjunctival Sac." Dr. W. O. Bridges, of Omaha, read a paper entitled "Early Signs of Typhoid Fever." See page 294. Dr. G. H. Simmons, of Lincoln, Neb., read a paper on "The Relation of the Medical Profession to Popular Medical Fads." Dr. H. M. McClanahan read a most excellent paper on the "Clinical Examination of Human Milk," which we hope to publish in the near future. Dr. F. W. Dean, of Council Bluffs, reported a rather unique case in a paper entitled "Necrosis of Thyroid Cartilage." Dr. J. P. Lord gave an interesting talk on "Skiagraph of Arterial Sclerosis," and exhibited several pictures. Dr. A. F. Jonas followed with a paper on "Ulcus Rotundum," which we publish in this issue. Dr. B. B. Davis then read his paper, which will be found on page 291, on "Gastroptosis and Enteroptosis." Dr. W. O. Henry, of Omaha, read his paper, "Lessons from Some Interesting Laparotomies."

BANQUET.

At 9:30 the meeting adjourned to the banquet hall, which was the admirable dining room on the top floor of the Grand hotel. The neatly decorated, capacious board could not accommodate all the guests, so an overflow table was spread. The banquet was presided over by one whose efficiency at all professional as well as social functions is well known. Dr. F. S. Thomas as toastmaster was at his best.

"Women in the Medical Profession" was the sentiment that Dr. Rebecca Hanna was asked to respond to. In a modest and unpretentious way she spoke of the struggle of women to get into the profession. This was done without bitterness on the part of the speaker, and it was a pleasure to see, although she was entirely undemonstrative, how thoroughly appreciative she was of the present high standing of female doctors and the full recognition accorded them by the profession.

"The Tonic Effect of Humor" was treated in the most scholarly and artistic manner by Dr. Coulter, whose well rounded and admirable sentences inclined one to the opinion that the doctor is more than ordinarily given to literature.

Dr. Donald Macrae, Sr., was introduced as the Nester of the society and was greeted by prolonged applause. The toast assigned him was "Our Medical Society." No one is so well fitted to respond to this toast as Dr. Macrae, who knows it from a to izzard. With a fatherly sympathy he spoke with the fullest knowledge and the profoundest wisdom.

Dr. B. F. Crummer had consented to respond to the sentiment "The Medical Profession of the West." His unavoidable absence caused universal disappointment.

"The Doctor at the Trans-Mississippi Fair" was responded to by W. O. Bridges, M. D. Coming from a gentleman who represents the high water mark of medical culture, the speech was, as everyone had a right to expect, pointed, polished, felicitous.

"An American at the British Medical Association" was responded to at some length by Dr. Lowry.

The banqueters adjourned at 2 A. M., more fully convinced than ever that the profession of Council Bluffs are capital entertainers, who make everybody feel welcome and at ease. "For they are jolly good fellows, which nobody can deny."

THE OMAHA MEDICAL SOCIETY.

Omaha, Neb., September 30, 1897.

Editor Western Medical Review: The Omaha Medical Society has entered upon an era of prosperity and now includes in its membership nearly all the able, progressive, up-to-date physicians of the city. There are about eighty names on the roll and the average attendance is nearly half that number.

The committee on program decided last spring to make an innovation and to occasionally devote the whole meeting to one topic. We had for one meeting a "Symposium on Uric Acid," and had papers on "Uric Acid and Food," "Uric Acid and the Nervous System," "Uric Acid in Rheumatism," and "The Treatment of Rheumatism." At another meeting we had a symposium on renal diseases. The committee also decided to press into our service any of the greater lights of medicine who might happen in their journeyings to visit Omaha. It found that Prof. Alex. Hugh Ferguson, M. D., of the Post-Graduate School, Chicago, was to deliver the opening address at the dedication of the new building of the Creighton Medical College and invited him to address the society on the following evening. He very kindly consented to do so, and on last evening met with us at our usual place of meeting, the Commercial Club rooms, and delivered a most clear, able, and instructive address on

"SURGERY OF THE GALL BLADDER AND BILE DUCTS."

His assistant, Dr. Anderson, displayed ten large diagrams representing types of cases and his methods. The following is a brief resume of his address:

The principal constituent of gall stones is cholesterin. There are three principal stages in cholelithiasis: First, the quiescent stage, in which the stones are in the gall bladder or neck, and without producing symptoms; second, a stage in which there is colic but no jaundice; and third, the stage with both colic and jaundice. Pain, in the second and third stages, is important, and particularly its situation. When the

Digitized by Google

stone is in the bladder or cystic duct, it is referred by the patient to the epigastric region; when the stone is in the common duct, the pain is referred to a distant region, the back, loins, groin, or kidneys. Pressure discloses local pain, always over the seat of the stone, and upon strong pressure the referred pain becomes less and less distinct. Jaundice occurs when the hepatic or common duct is obstructed by a stone. This becomes chronic, lasting months or years. Stone in the common duct causes an intermittent or remittent jaundice. If jaundice is continuous and increasing it is more characteristic of malignancy. Vomiting is often persistent in chronic cases. Pyrexia is an interesting symptom in about one-half the cases and cannot always be accounted for; when present early it is attributable to traumatism by the stone and to sepsis because the bile is not always aseptic. One case of pyrexia showed the general peritoneal cavity filled with bile and Klebs found it entirely aseptic. In some cases the warm irrigating fluid used in the after treatment was 103° while washing out the cavity, and the patient showed 106° soon afterwards, and yet there were no germs in the bile. The temperature may be partly reflex,—an irritative fever. As a rule this form of pyrexia subsides in twenty-four hours without treatment. In one case, in a woman of 70, there was extraordinary collapse, the heart slow, pulse imperceptible or feeble, and yet there was no stone found; colic had been very severe. The diagnosis presents many difficulties. Appendicitis often complicates when the appendix is in the region of the liver. Pain is, of course, always present; there is fever in about half the cases of gall stones; the liver and the gall bladder are enlarged, the latter being the case in all my early cases. Of forty-seven cases the gall bladder was dilated in all the acute cases and contracted in the chronic ones only. One case presented a gall bladder so enormously dilated as to reach the crest of the ilium. This case was very difficult of diagnosis. It simulated greatly floating kidney, or hydronephrosis. One diagnostic point is clear: a floating kidney slips away from your hand; a dilated gall bladder does not. When one can pass a long bougie to the cecum and can make out the tumor in front of the bougie, it is a dilated gall bladder. Deep prodding elicits a severe, characteristic pain. Early operation is desirable, whether jaundice is present or absent. Flexion of the gall bladder had been met with twice; both were chronic cases, one at the age of 16, the other 70; both had very severe colic; both were operated upon; in both the gall bladder was enlarged and displaced downward and inward. After opening the abdominal cavity, manipulation rendered the gall bladder softer and drove the contents forward and established the diagnosis of flexion. There was some hesitation, jocosely speaking, in making the diagnosis of flexion, because of the fear that these cases might fall into the hands of a gynecologist, who might recommend a pessary. Dropsy has been met with in four or five cases. There was a history of colic in one only. In these cases the gall stones were all large, irritated only a little, and obstructed slowly. Empyema of the gall bladder is sometimes seen. In one case, a patient of 37, convalescing from typhoid fever, the gall bladder was large, pus was abundant, many stones were present; she was too weak for anesthesia; cholecystotomy was done by aid of cocaine; recovery took place.

Operation.—The correct term for the operation is cholecystotomy. The ideal operation, with complete closure at the time, should not be attempted, because one can never know during the operation whether there is infection; hence drainage is always the best procedure. Of thirty-seven cases operated upon there were two deaths, one from shock. If the gall bladder is dilated the incision should be perpendicular and near the tenth costal cartilage. If the gall bladder is contracted and jaundice present an oblique incision parallel with the cartilage is preferable. After the incision gauze is well packed around and a double-flow tube, with a bulb on the distal end, used to thoroughly wash out the fluid contents, after which a drain is used, so that nothing gets in the general cavity. For stones a scoop is used. The handle has a scoop of different size at either end. In closing, suture the gall bladder high up to the fascia and peritoneum only. This method does away with the fistulæ. The older method was to suture the bladder to the peritoneum and skin, making a muco-cutaneous tract, ensuring a fistula in about 33 per cent. of the cases. For the gall bladder sutures, catgut is preferable. Drainage is always best and silkworm gut used to close the external opening, carefully avoiding stitching in the gall bladder. In a case of contracted gall bladder, adhesions are frequently found at once upon opening. As few of these should be broken down as will allow freedom of action and in the line of the work toward the gall bladder. The gall bladder should then be opened and the stone or stones removed. If there is no jaundice present, the gall bladder should be emptied and drained; if jaundice is present there must be a track established for the bile to drain away. Any stone found in the bladder, cystic, or common duct should be removed. When a stone is found impacted the best method is to use a small, thin curette pushed beyond the stone and pulled back. The probe should always be used to make sure that all stones are removed. Curette them out if possible; cut if you must. Test the potency of the duct with water. The author's original method is to use a glass tube with a bulb or shoulder on its distal end where inserted into the duct. A rubber bulb holding four ounces of water on the proximal end allows one to force the water down the common duct when clear of all stones and absolutely prove potency. Cholecystectomy is only mentioned to be condemned in cholelithiasis. Cholecystduodenostomy, the operation with the Murphy button, is already obsolete. Four successful cases in my own hands could not save it from condemnation, because more dangerous than necessary. Choledocholithotomy is the chosen operation in obstruction of the common duct when it cannot be remedied via gall bladder and cystic duct. In this operation (done five times successfully by the speaker)

Digitized by Google

break up adhesions, as previously suggested, in the line of the work; then find the foramen of Winslow, into which the ends of two fingers can be placed to find the stone. Great care must be taken not to diagnosticate inflammation of the head of the pancreas, sometimes met with, as malignant disease of the pancreas. One case has been seen in which there was no gall bladder. The jaundice was remittent and the stone in the common duct. Do not suture the common duct at all. Always use gauze and a drainage tube. Drainage is safe. The unbroken adhesions really are protective walls.

Fistulæ.—The speaker has found recorded but fourteen cases in which an attempt has been made to close fistulæ by sending the bile down through some other channel. In these cases the speaker first demonstrates the potency of the common duct by his method previously described. In one case he passed twelve ounces of water through, calling it an upper enema. The incision for closure of a fistula should only be made down to the peritoneum. The gall bladder will then elevate itself and recede. The fistula in the gall bladder should then be closed with figure-of-eight sutures and the external fistulous opening be closed. Four cases have thus been treated, all successfully.

Suppression of bile was first noticed after operating for hydatids. It has been seen in some cases of gall bladder surgery and once in a case of tubercular peritonitis. Chloroform has been thought to have been the cause in some cases. In one case it was suppressed for five days; in another for six days. When in these cases the jaundice deepens transfusion may be necessary.

DISCUSSION.

President Bryant then invited discussion of the address. All the speakers were very laudatory of the address for its clearness, conciseness, and simplicity.

Dr. A. F. Jonas spoke of the great difficulties often encountered in the differential diagnosis. He related a case diagnosticated as appendicitis, in which for good reason he did not dare to "prod," as suggested by the speaker as proper in some cases, and in which he found a distended gall bladder reaching to the ilium. He had also met with two cases diagnosticated as enlarged gall bladders which proved to be appendicitis, the appendices being found under the arch of the ribs. His methods had been similar to Dr. Ferguson's.

Dr. J. P. Lord said that he had done nothing beyond cholecystotomy and was glad to learn of the great importance of this operation. He had met with two cases of jaundice due, in his judgment, to chloroform. He mentioned a case of fistula met with in which there was an enormous secretion of bile. He had given large doses of oxgall. When the oxgall was discontinued for two or three periods there had appeared dangerous hemorrhages from the mouth, requiring the actual cautery. The re-use of the oxgall obviated the return of the bleeding.

Dr. J. E. Summers, Jr., mentioned his similar observations as to the referred and local pain in gall bladder cases. His experience had been that chronic cases were slow. He was particularly pleased and instructed by the statement of Dr. Ferguson in regard to his method of closing fistulæ, which were new to him. He spoke of three cases of stone in the common duct, one of floating liver, and one of flexion of the gall bladder.

Dr. W. O. Bridges expressed himself as much pleased with the remarks on differential diagnosis. In cases of cholelithiasis he regarded time as an element of great importance. He had met with cases of months' standing, the jaundice intense, emaciation extreme, anorexia, and clay colored stools continuous, and yet, operation being refused, recovery had been complete. He recalled one such case several years ago in which jaundice had been seen but once since.

Dr. Porterfield, of Atlantic, Iowa, mentioned a case seen yesterday which was, in his judgment, one of empyema of the gall bladder.

Dr. Macrae, Jr., of Council Bluffs, expressed his great pleasure in hearing the address and of the great impression made upon his mind by the detail of the method of closing the fistulæ.

Dr. W. Ross Martin related in brief a case of operation upon what was called by the operator a case of malignant disease of the pancreas. He felt certain now, from the fact that the patient was still alive, that it must have been one of those cases of inflammatory swelling of the head of the pancreas related by Dr. Ferguson.

Dr. W. F. Milroy asked Dr. Ferguson to state in his closing of the discussion how long one could live who had a fistula and a common duct not potent.

Dr. Ferguson in closing spoke of the chronicity of these cases as being as long as thirty years, a condition not true in malignant disease. He stated the jaundice of malignant disease is persistent, never intermittent. As to the time for operation he felt that the surgeon should in all cases assert his function, viz., to relieve pain and save life. All cases in which there were repeated attacks, or evidence of obstruction of the ducts, required operation. There may or may not be recurrence. The stone, if small, might also pass down, but being so often of variable size it was unlikely, and it was dangerous to await that improbable end. The dangers were jaundice, suppression of bile, suppuration, and carcinoma, due to the chronic irritation. About 95 per cent. of cases of carcinoma of the gall bladder were due to gall stones. It was utterly impossible to say that a case of biliary colic will recover. One case will have a large stone, another a small one, and one cannot distinguish between them, and there are often different sizes in the same case. He advises operation to relieve the pain, and early. He spoke of a case with an interval of six years between attacks. He felt that no case ought to be allowed to become chronic, endangering the establishment of jaundice and running the risk of the added danger of pyrexia. He related one case in which he advised an operation during an attack, which is the usual advice. It was performed. Cancer developed later, and death followed. It was a chronic case of four years' duration. As regards the

Digitized by Google

operation for fistula, he stated that the peritoneum was not opened. When the adhesions are broken up the gall bladder elevates itself and recedes. In answer to Dr. Milroy he stated that cases of fistulæ with non-potent common duct had lived as long as one, two, and three years without ill-health. A fistula should be closed whether symptoms of declining health were present or not. It was a nuisance. He thoroughly approved the oxgall treatment before closure was attempted.

The address was listened to with great interest. After the address an hour's reception was held in honor of our distinguished guest.

R. M. STONE, Secretary.

SIXTY-FIFTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION AT MONTREAL.

BY H. B. LOWRY, M. A., M. D., PH. D.,

THE OFFICIAL DELEGATE OF THE MEDICAL SOCIETY OF THE MISSOURI VALLEY TO THE MONTREAL MEETING; ASSOCIATE MEMBER OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE; PROFESSOR OF NERVOUS DISEASES IN THE OMAHA MEDICAL COLLEGE.

In compliance with the REVIEW's request I shall endeavor to give what might, with much propriety, be called a popular report of the first meeting (on this continent) of the British Medical Association. Indeed, it is the first meeting ever held outside of Great Britain. Whether or not my report be popular, it will not be scientific.

The doctor's education is essentially a scientific one. Not only this, but medicine includes so many sciences that physicians have an acquaintance, more or less intimate, with a greater number of technical studies and, therefore, a wider sympathy with things scientific than any other class of men.

At the annual meeting of the British Association for the Advancement of Science, held last August in the city of Toronto, Canada, it was not a matter of surprise that many physicians should be in attendance, or that a medical gentleman presided over the meetings. This is not all; presidents of two of the sections were physicians. It is alike creditable to medicine and science that each of these gentlemen has a reputation as a medical man that is world-wide.

I acknowledge myself to be a confirmed hero worshipper. To meet great men is to me both a gratification and an inspiration. At the Toronto meeting were some of the world's greatest scientists. The eight days spent there were scarcely less profitable to me from even a medical standpoint than was the Montreal meeting. In a joint session of the sections on physiology and botany the discussion of the cell may be put down as the latest scientific expression of the subject.

The anthropological section was presided over by Sir Joseph Turner, the learned professor of anatomy at the University of Edinburgh, who is thought by many to be the greatest living anatomist. His presidential address was one of the most learned and at the same time one of the most original and interesting of the meeting. It embodied the result of his studies and observations as to the cause of the curves of the spinal column of certain animals, especially of man and the anthropoid apes.

I will give but one more example of the wealth of medical learning—intellectual gems that might be had for the picking up. One session in the section on physiology was devoted to a discussion of the action of anesthetics on the nervous system, and especially to the action of chloroform. The paper was read by Professor Waller of St. Mary's, London, who was president of the section on physiology in the British Medical Association at Montreal. The subject was discussed by Bowditch, of Boston; Lee, of Columbia; Lombard of Michigan University; Professor Leob, of Breslau; Gascall, of Cambridge University, Harrington, of Liverpool; Richet, of Paris; and Foster, of Cambridge, president of the section. Could one imagine a more brilliant galaxy, or could one, even the most stupid, doubt the benefits to be had from such a discussion?

In almost every section might be heard men with world-wide reputation in their respective departments. In the section on chemistry were men like Ramsay, Roberts-Austin, and others. In economics, Professor Goldwin Smith, the Hon. James Brice, and others perhaps more efficient but less generally known. In mathematics and physical science were many famous men. Professor Forsyth was president. Oliver Lodge, the theoretical electrician, was there, and A. G. Vernon-Harcourt, of Oxford, as cultivated and refined in appearance as his distinguished kinsman, the politician, is the reverse. But in this section the central figure was Lord Kelvin, who since the death of Helmholtz is perhaps the greatest living scientist. It will be remembered that as Sir William Thompson he superintended the laying of the first submarine telegraph.

Toronto is the most English town in Canada. A population of 250,000 is claimed, but it lies too near the American line for these figures to be implicitly relied upon. However, it is a beautiful city. I do not know one in the United States of its size or smaller—possibly Washington excepted—that is equally fine. The street car system is most admirable; the business buildings substantial and many of them handsome; the residences are, many of them, comfortable and tasty, and a few sumptuous. Not a few of the public buildings are noteworthy. The leading Methodist church cost about $300,000. Goldwin Smith calls it a cathedral. The new Parliament Buildings, the University of Toronto with its numerous buildings, together with the buildings of the various colleges affiliated with the university, all situated in Green's Park, make altogether the most beautiful college campus I have ever seen.

Toronto's hospitality is well known, for it is the city of conventions. The name, which is of Indian origin, signifies "place of meeting." Garden parties or excursions were given every day by prominent citizens or clubs. Among the former were Goldwin Smith, Mr. Osler, a successful banker and brother to the distinguished physician, Col. Sweeney, President London, and others. Then there were convocations, soirees, conversaziones, and receptions. The banquet, given

Digitized by Google

in honor of Lords Kelvin and Lister and Sir John Evans, and presided over by the Ear of Aberdeen, was the social event of the meeting. Invitations were in great demand, and many were turned away for lack of room. No building in the city could seat more than six hundred at table. Not a seat went unoccupied. Of course it goes without saying, the dinner was both sumptuous and elegant. The social functions were quite formal. The invitations were neatly printed and required an answer. The ones sent out by "Their Excellencies the Governor General and the Countess of Aberdeen" may fairly be called elaborate.

Both at Toronto and at Montreal great pains had been taken in arranging excursions. In the former city the street car company and the yacht club, especially the latter, treated us royally. Saturday was given up to excursions, there being several of them. The greatest number, however, went to Niagara. One would fancy that Niagara needed nothing to add to its interest, but I assure you that scientific explanations are most helpful, not only as to the geological origin and history of the cataract and the gorge, but when one visits the great power houses in the company of men like Prof. Oliver Hobbs or the man who superintended the laying of the submarine cable, one can understand how knowledge adds to the beauty and grandeur of Niagara.

The more prolonged excursions were to be taken after the close of the meeting, one extending as far west as the Pacific coast. The one that was especially planned for the doctors was by Parry Sound, Algonquin Park, and Ottawa to Montreal. Leaving Toronto in the morning this party went north on a special train. At Avondale we were on the shores of Lake Simcoe, a body of water comparable to Lake Champlain in everything but the distant mountains that form the background of the American lake. In this vicinity were the Huron missions, which ended in a tragedy that annihilated that people as a nation. Parkman tells most graphically both the story of the missions and the war of extermination waged by the Iroquois. At Avondale the road divides, one branch going north past the Muskoka lake region, perhaps the favorite health resort of Canada; the other branch of the road goes to Penetanguishene on the Georgian Bay, where boat was taken for Parry Sound. Five or six hours are required for the passage, and during that time the tourist is never far from land, for he is constantly surrounded by hundreds of islands. There are, it is said, thirty-five thousand wooded islands in the eastern portion of Georgian Bay. Their forests have never been felled or in any way molested, except in a few instances a place has been cleared large enough for a summer cottage. As the boat glides in and out of the clusters of beautiful green islands that everywhere cover this inland sea, the charm cannot be described. Of this sort of thing the world has no other of equal beauty to show, the nearest approach being, of course, the Thousand Islands of the St. Lawrence. At Parry Sound Pullmans were waiting on the lake shore, where our party slept undisturbed until 3 o'clock in the morning, when we started for the Algonquin Park on the Canadian Atlantic Railroad, opened within the year. When day broke this road was the only sign of civilization visible. Not a clearing, not a cabin, not a cow or a chick was anywhere to be seen. Nothing but the primeval forest and the outcropping Laurentian rocks. The country was apparently flat, with hundreds of lakes, fine as Lake George, save for its rugged environment. If there are thousands of islands in Parry Archipelago, here amid these unbroken forests are thousands of lakes, whose mirror-like surface is broken by no oar and whose beauty gladdens no eye.

Amid these woods is the Algonquin Park, a game preserve, including an area forty by fifty miles. Here the moose, the deer, the bear, and the wolf are unmolested and the wild duck raises her young in security, while the beaver and the otter scarcely seek a hiding place from the passing train. At Rock Lake, just at the edge of the national park, we stopped for lunch, a most sumptuous spread having been sent out by the Toronto people the day before. One hundred and fifty guests sat at the improvised table beneath canvass in a birchen wood on the lake shore, the situation being novel to most and interesting to all.

I was informed by an old lumberman that oats or potatoes would not mature here; that the mean annual temperature was below the freezing point. The coldness of the climate I fancy is due, not so much to latitude as to other causes. Although the country seems level, it is in reality the highest land in Ontario. A glance at the map will show that the isothermal line bends farthest south at this point. In this lake-dotted wilderness there are new interests at every turn, but an entire article would not suffice to tell of them.

The next day we spent at Ottawa, where we were met by a committee of citizens who showed us the city with its marvelous lumber and paper industries, its magnificent public buildings, and superb views. We were banqueted by members of the government.

From Ottawa some went directly to Montreal and some of us went to Kingston and down the St. Lawrence by the enchanting Thousand Islands and through the dreadful, dark, rushing waters of her rapids, and on to Quebec.

The sixty-fifth annual meeting of the British Medical Association opened with much ceremony in Montreal on August 31, 1897. The Anglican cathedral at high noon was filled with the members and guests of the association and their friends. Two bishops officiated. The sermon was preached by the Bishop of Niagara, who said that he regarded it the greatest honor of his life to address this distinguished body. To an American this sounded extraordinary, but however strange it might sound he had no trouble in appreciating the justness of the remark.

At 2 o'clock in the afternoon the meeting was called to order by Dr. Saundby, president of the council. Prominent among those on the platform were Lord Lister, the governor general of Canada, the lieutenant governor of Quebec, Lord Strathcona, and the mayor of Montreal, who made the principal address of welcome. He was followed by the Earl of Aberdeen and

Digitized by Google

Lieutenant Governor Sir Adolphe Chapleau. All were cordial and hearty in their words of welcome. Dr. F. G. Roddick then read his presidential address. To the visitor it was full of interest and information, as it dealt with the medical aspect and resources of Canada.

At 4 P. M. Dr. and Mrs. Roddick received at the Academy of Fine Arts. At 9 P. M. there was a reception at Laval University. This is a catholic institution, where the text-books are in the French language. I addressed a member of the senior class, who could not understand English, showing how exclusively French the institution is. The company was received by the Archbishop, a small, dark man, with a most winning manner, who spoke in the most polished English to the Earl of Aberdeen and I presume in equally refined French to Sir Wilfred Laurier, Canada's premier. Later in the evening Prof. Chas. Richet was introduced and delivered an address on "The Work of Pasteur and the Modern Conception of Medicine." Prof. Richet is perhaps 50 years of age, more than six feet high, and quite slender. Upon erect shoulders is a rather small head, with closely cropped hair. He impresses one as being a very modest man, but was more at ease in giving his address than in the reception room. Even among the French speaking people of Laval, he seemed not in his element. He was the accredited delegate of the French Republic, as well as of the Faculty of Medicine of Paris. Since the death of Claude Bernard and of Brown-Sequard, he is perhaps the most prominent French physiologist. He calls Pasteur his master and was one of the first to make successful experiments in serum therapeutics. He expressed himself as being unfortunate in spending so much time on tuberculosis. The address was delivered without manuscript and was well received.

The section in medicine was presided over by Dr. Stephen Mackenzie, of the London Hospital, who presided in a fair and dignified manner, as one would expect, judging from the enviable position he holds in his profession. Prof. Stewart, of McGill University, read a paper on "Arthritis Deformans," which was discussed by Osler, Tyson, Wilson of Jefferson, Jacobs, Whitaker of Cincinnati, and N. S. Davis; also by Shingleton Smith, Hanford, Mackenzie, and other distinguished English doctors. From time to time other papers in this section created just as much or more interest and equally brilliant discussions. Every section was full of interest. Sir Christopher Heath was president of the section on surgery and Nettleship that of ophthalmology, and so the thing continued to the end of the list. A most important feature of the meeting was the addresses given by the presidents of the different sections. Those that might be mentioned are the ones delivered by Mackenzie, Heath, Watson Cheyne, and Nettleship. They show a firm grasp of the subjects treated, a wide acquaintance with the literature, and are in every way up to date. Of course the most pretentious addresses of the meeting were those given at the general sessions. Of these there were four. The one given by President Roddick has been already referred to.

Professor Osler, of Johns Hopkins, gave the address on Medicine. This favorite author and teacher is as well known in England as in America or Canada. I had the pleasure of hearing him deliver a course of lectures before the Royal College of Physicians, London, more than ten years ago. He still looks a young man. His address on medicine was thought by many to be the finest delivered before the association at its last meeting. That it was unusually learned, finished, and apropos none will deny.

Mr. Banks' address on Surgery dealt exclusively with the army surgeon, and especially with the army surgeon of the past. Mr. Banks has won for himself the reputation of being gifted in a literary way. This address I am sure will add to that reputation. It was popular and after the methods of literature appealed as much to the hearer's sympathy as to his intellect. He incidentally mentioned that trephining had gone out of date, presumably out of deference to Scotch feeling.

Dr. Briggs gave the last address of the series. It was on Public Health, and was an outline of the work done by the New York Board of Health, with which he has been so prominently connected. The address received the closest attention. It was interesting and instructive. Apparently it was more keenly appreciated by the English physicians than by those on this side of the Atlantic. Especially was this true of the Londoners.

Notwithstanding the national capital is at Ottawa and that it has the prestige that the residence of the governor general gives to society in his home city, Montreal still remains the social center of the Dominion. The garden parties and receptions tendered the association were all that could be expected, even in a metropolitan city with half a million of population. As cities grow larger society grows more exclusive. Montreal is noticeably less democratic than Toronto. European social etiquette, as well as that of countries under European influence or government, is much more exacting and has more of state and pomp than with us. In democratic Canada or republican Mexico social functions are not only attended with greater pageantry, but are held in higher esteem.

One of the most thoroughly enjoyable social events that I attended at Montreal was the mid-day lunch given on the top of Mt. Royal by the mayor. This party was limited to two hundred, and as the association's journal showed twelve hundred in attendance it will be seen that most were of necessity left out. But those of us who were fortunate enough to receive invitations had all the more cause for self-gratulations. The meetings of the sections were held in McGill University. At noon on Wednesday the finest turnouts in the city were waiting in the campus to carry us up the mountain. We were driven through the principal residence street of the city and over that splendid winding road that leads to the summit of Mt. Royal, the outlook becoming more magnificent at every turn. The tables were spread under a pavilion just on the brow of the mountain. A superb view is now before us. At our feet, spread out like a map, lies the metropolitan city of Montreal, with its shady ave-

Digitized by Google

nues, its ample parks and beautiful squares. In full view is the historic Hotel Dieu, around which cluster the memories of Millie Mance. Nearer is the new Victorian Hospital. Whether considered from an architectural point of view or in reference to the most approved appliances, the doctor will try in vain to recall its equal. Directly in front rises the graceful, stately spire of the finest Methodist church in the world. To the right is St. James' cathedral, and farther away, beyond the Methodist church, is Notre Dame. These are both Roman Catholic, and are the most magnificent church edifices on this continent north of Mexico. Past this beautiful city flows the majestic St. Lawrence, beyond which stretches a distant landscape, including the Adirondacks on one side and the Green Mountains on the other side of what the beholder knows to be Lake Champlain.

A word about the reception given the members and friends of the association by Lord Strathcona will serve to show the interest taken in the meeting by those who are not members of the profession. His lordship's residence and grounds are among the finest in Montreal. On his beautiful lawn was erected a tent, with a horseshoe-like table extending three-fourths around the canvas. Here was served to two thousand guests during the evening the daintiest of refreshments and the choicest of wines. The grounds were tastefully illuminated by electric lights and hundreds of Chinese lanterns. The fire brigade kept on the spot betokened the practical business man. Music was furnished by a military band and an orchestra. The street was packed by the common people, who came to enjoy the music and the illumination. The house was luxuriously furnished and contains some fine wood carving. In the upper portion is an art gallery, arranged in the most approved manner, and contains one of the finest private collections on this continent.

Many years ago Mr. Donald Smith, a young man, was sent out by the Hudson Bay Company, and after a successful business career there he came to Montreal. By reason of his satisfactory management of the company's affairs, as well as his prominence in railroad and other commercial circles, he became Sir Donald Smith. His wealth continued to increase, and so did his munificence. This man has given more largely to public institutions than any other of Canada's citizens. His greater gifts have been to McGill University in the way of college buildings and equipments, and to hospitals. Because of the large public spirit which he has manifested he has lately been made Lord Strathcona and Mount Royal. Thus, by his business ability and his interest in public affairs, he has won for himself both knighthood and a baronetcy. His princely gift to the Royal Victorian Hospital has endeared him to the medical profession, for which he has in many ways shown his friendship. Although now an old man, he is quite vigorous. He is courteous, as Englishmen usually are, and most cordial, which all Englishmen are not. No man did more to welcome and entertain the association than did Lord Strathcona and Mount Royal.

The society's dinner was given at the Windsor Hotel, and was the crowning social event of the meeting. Both the dinner and the decorations were everything that could be desired. The wines—with glasses for five kinds at each plate—were said to be very fine. The four hundred guests that sat in the sumptuous dining hall probably included a greater number of famous doctors than ever before sat at table in this country. Something of the personnel of this distinguished body might not be uninteresting. Agreeably to English custom, the Earl of Aberdeen, as governor general, was present as a guarantee of the noted gathering's social standing. John Campbell Hamilton Gordon, seventh Earl of Aberdeen, is 50 years old, six feet in height, slim, and agile. He has dark hair and a full, dark beard. An Oxford training, supplemented by a long public career, has given him genuine culture. A certain want of repose, however, detracts somewhat from his public speaking. He fidgets; indeed, he is what may be fairly called a nervous man.

Lord Aberdeen is a good example, and I believe is representative, of that class of the English nobility who believe, and act upon the belief, that they, as a class, owe the public the best services of their lives. There is, of course, in this country no set of men that can be compared to them. It is difficult for us even to conceive of a class of men giving the best efforts of their lives to the public, not for pay, but from a sense of duty. Before he was governor general of Canada he was lord lieutenant of Ireland under Mr. Gladstone. He is assiduous in the performance of his public duties, which consist largely of being present and often presiding at social and semi-social gatherings, for he, like the queen, reigns but does not govern.

Lord Strathcona, the mayor of Montreal, and some other distinguished laymen were present. However, it is of a few professional men that I wish to say a word. Sir Christopher Heath, iron-gray, slender, refined, would be a noticeable man in any company. Near me sat the two Fosters—not related—one stout and dark, with heavy side whiskers,—this is the doctor-politician and is a member of parliament; the other is Michael, the idol of all medical students. He is slight and light, wearing a full, grizzled beard, is unassuming, gentle, and lovable and much sought after. Dr. Saundby is young looking, notwithstanding his iron-gray hair, intellectual in appearance, graceful in motion or repose, handsome, and indeed is easily the Apollo of the meeting. Maj. Gen. Wyman, with his military bearing, was down for a toast, as was also Prof. Keen, of Jefferson Medical College. The latter's remarks were probably the brightest of the evening. Prof. Osler was everywhere a distinguished guest. But these gentlemen are personally known to my readers and I only mention them to show that on this, as well as on all other occasions, the guests from the United States were shown every courtesy. I hope the American physicians will bear this in mind when English or Canadian doctors come among us. Watson Cheyne, tall and well built, with his sandy complexion, has aged but little since I met him in London ten years ago, but seems to have ful-

Digitized by Google

filled the promise that was in him. Stephen Mackenzie is also sandy, but is not tall, and inclined to stoutness. Although not so widely known, he is more favorably known than was his brother, the late Morrell Mackenzie.

Lord Lister, known to the medical world as Sir Joseph Lister, bears his seventy years with exceptional grace and vigor. Of medium height, with culture and refinement stamped upon every feature, dignity characterizes all his movements. Width of culture has broadened his sympathies, making him uniformly considerate of others, courteous, affable, and easy of approach. He is not only a surgeon, but a scholar as well. I heard a prominent Presbyterian clergyman proclaim publicly how proud he was to have Lord Lister's name on his academic diploma. Undoubtedly he is the greatest medical man of this century. Antisepsis, or rather asepsis, will make his name as enduring as the names of Hunter, Harvey, or Jenner.

Although lionized to an extent inconceivable in a republic like ours (where there are no titles to honor), he bears it all with becoming modesty, though not always without embarrassment.

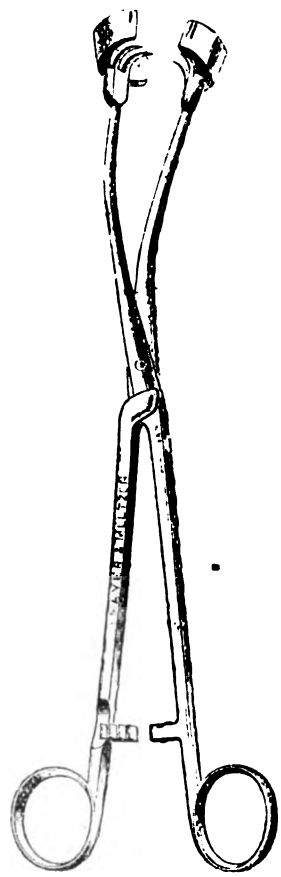
Canada is democratic almost as the United States, yet their treatment (and ours) of titled persons demonstrates the fact that worship of rank is personal and will live under any social system.

From whatever standpoint judged, the Montreal meeting of the British Medical Association was a brilliant success, and I can but repeat with Macaulay, May God give such another day to Rome, and may He send me to see it.

Miscellaneous.

Disinfection of Typhoid Excreta.—1. The best disinfectants of typhoid stools for practical use are: (*a*) 1 to 500 acidulated solution of corrosive sublimate; (*b*) 1 to 10 crude carbolic acid solution; (*c*) chlorinated lime. 2. Owing to the possibility of injury to plumbing, the carbolic acid solution is preferable whenever plumbing is concerned. The lime is best for country use in privies and trenches. 3. The disinfectant should be thoroughly mixed with the stool and left in contact with it fully two hours. Enough of the disinfectant must be added to cover completely the stool with the solution. 4. The bed pan should be kept ready filled at all times with at least a pint of the disinfectant, into which the stool is at once discharged, and should be cleaned with scalding water and one of the disinfecting solutions. 5. Rectal thermometers, syringes, tubes, and all utensils coming in contact with any of the fecal matter must be disinfected with the corrosive sublimate or carbolic acid solution. 6. After each stool the patient's perineum and adjacent parts should be washed and sponged with a 1 to 2,000 corrosive sublimate solution. 7. Nurses and attendants should be cautioned to wash their own hands thoroughly and immerse them in a 1 to 1,000 corrosive sublimate solution, after handling the bedpan, thermometer, syringe, or patient, or giving sponge or tub baths. 8. All linen and bedclothing used by the patient should be soaked in a 1 to 20 carbolic acid solution and boiled for fully two hours. 9. Disinfection of the stools should be begun as soon as the diagnosis of the enteric fever is established and should be continued for ten days after the temperature has remained at the normal. 10. In localities where a proper drainage system is lacking, the stools should either be mixed with sawdust and cremated, or buried in a trench four feet deep after being covered with chloride of lime.—Dr. W. Gilman Thompson, in Albany Medical Annals.

Forceps and Director Combined, for Vaginal Hysterectomies.—I am sure that every surgeon of experience in the operation of abdominal pan-hysterectomy will admit at once that the chief difficulties are encountered in dealing with the floor of the pelvis and roof of the vagina. It has long appeared to me that a suitable vaginal guide would not only materially facilitate operative technique at this juncture, but would obviate the danger of encroaching too much on the roof of the vagina. In my first six cases of complete extirpation I resorted to the abdomino-vaginal method, commencing the operation as in the first stage of vaginal hysterectomy; but this method is open to the objection that upon opening the peritoneal cavity some special indication may be found against completing the operation on the lines originally intended, leaving the patient with a vaginal wound to still further hamper her recovery. Mr. Bowreman Jessett, in this operation, used a Ferguson speculum, pushed up by an assistant as a guide; but the difficulty—or, rather, I should say, the hopelessness—of keeping the vaginal cervix in the vast majority of "fibroids" within the lumen of a speculum is at once obvious. Other surgeons have used the finger of an assistant pushed up into the vagina as a guide to cut down upon, but this is a procedure not likely to recommend itself to the precise and careful operator. The vaginal forceps and director, of which illustration appears, has been used in four cases with much advantage to the patient and with the greatest satisfaction to myself.—M. U. O'Sullivan, L. R. C. P. Edin., in Lancet, September 18.



In reply to a question of a conceited fool who asked the elder Dumas if he thought his ancestors were monkeys, the author replied: "Yes, and my family began where yours leaves off."

Digitized by Google

The Operative Treatment of Spinal Curvature.—At the French Academy of Medicine, M. Chipault has, from the commencement of his researches on the reduction or correction of spinal deviations, maintained that the correction will not be permanent unless the vertebral column is kept in its new position by direct fixation of the spinous processes; this applies both to scolioses and to the results of Pott's disease. All the authorities on the subject now agree with him. M. Regnault has, in the first place, demonstrated before the Anatomical Society that Pott's disease and spinal curvatures (scolioses), if left to themselves, tend to recovery by ankylosis of the posterior portions of the vertebræ, and that metallic fixation of the processes consequently does no more than anticipate in a most logical way the natural process of recovery. In the next place, M. Menard has exhibited to the Academy and to the Surgical Society a series of anatomical preparations which proves the harmlessness of the operation for reduction. So far as the spinal cord and the parts surrounding the vertebral column are concerned, the correction of these deviations sometimes produces a remarkable change in the configuration and dimensions of the space lying in front of the vertebral column, and these anatomical preparations show that for the purpose of rendering the improvement permanent it is necessary that the spine shall be fixed in the new position. Many cases of recent occurrence in which distortion returned when fixation was neglected after the correction of the deformity prove the absolute necessity for fixation of the processes. The attention of surgeons in many different places seems at the present time to be directed to this subject, and M. Chipault has now given an account of the improvements which he has during the last few months made in the operation originally devised by him. It consisted, as will be remembered, in tying the processes with stout silver wire, a method which is satisfactory and will continue to be employed under certain circumstances, but is, nevertheless, sometimes difficult of application on account of the stiffness of the wire. In place of the wire he therefore now uses hooks of four different forms, two for lateral deviations and two for antero-posterior deviations; each form of hook is made in two qualities, one being rigid, for use when it has been possible to correct the distortion completely, and the other being pliable, so as to be available when the correction of the deviation is only partial. The hooks can be applied with the utmost ease. They cause no local disturbance and do not interfere with the development of the portion of the spine to which they are applied. Lancet, August 28.

That stitch in the side in your case of pneumonia can be relieved by an application of adhesive plaster.

Pregnancy and Fibroids.—Keiffer (Sem. Med., May 7, 1897) discussed before the Obstetrical Society of France the special indications for the treatment of pregnancy and parturition when complicated by fibrous tumors of the uterus. In pregnancy there are risks of miscarriage, of hemorrhage, of premature birth, of abnormal presentations, of placenta previa, of dystocia through excessive development of the tumor, of various degenerations, of dangerous compression of the pelvic or abdominal organs, of ascites, etc. The premature death of the fetus forms, in conjunction with these accidents, an additional source of danger. On the other hand, the tumor may follow the physiological modifications of normal uterine tissue, and act like the latter in all respects; in such a case curetting of the uterus after miscarriage is possible. Should the pregnancy reach its normal termination, hemorrhage may be met in the ordinary way; podalic version can be performed or instrumental delivery effected, as best suited to the case, or the tumor causing the dystocia may be removed either by laparotomy or per vaginam. Extirpation of the whole organ may be possible in the worst cases. Whatever may be the percentage of accidents in such cases, it is enough to show that the woman can be delivered, and may give birth to a living child, to make it easy to refuse hysterectomy. Mere curetting seems to be enough to deprive fibromata complicating pregnancy of most of their dangers. The method of treating severe hemorrhage by hypodermic and intravenous injections of artificial serum has also contributed largely to this result. Curetting has not only a beneficial action on the tendency to hemorrhage, but protects the uterus against saprophytic or microbial infections, to which the presence of an imperfectly vascularized neoplasm renders it more prone. As regards general treatment, the diet should be regulated, rest enjoined, and hydrastinine and kindred substances should be administered. In advanced pregnancy the amount of obstruction by the tumor will determine the procedure necessary for safe delivery. During labor, abnormal presentation or the presence of dystocia will indicate whether version should be performed; in the latter condition version is the most advantageous mode of extraction. Removal of the fibroma is advisable when it in itself constitutes the main obstacle to delivery, and when it is subperitoneal, pedunculated, or easy of access. Either variety of pelvotomy is indicated when the tumor is in the lower uterine segment, and the diameter of the bony pelvis so reduced thereby that the alternative is a Cæsarian section. Total extirpation of the uterus and appendages is indicated .1) when the tumor independently of the pregnancy calls for operation; (2) when pregnancy is arrested and delivery impossible; (3) when there is suppuration following retained placenta; (4) after Cæsarian section necessitated by fibrous tumors.

Carbonate of Guaiacol.—By Prof. Dujardin-Beaumetz, of Paris. (Abstracted from the Dictionnaire de Therapeutique.) Therapeutists are to-day in accord in regard to the good effects of creosote and guaiacol in the treatment of tuberculosis. But they are also agreed that the tolerance of these drugs is far from being the same in different patients. Various difficulties, loss of appetite, imperfect digestion, and sometimes vomiting, are caused even by very small doses. This occasional intolerance depends above all

Digitized by Google

upon the quality of the drug, the constitution of which varies according to the mode of its manufacture; for creosote is not a pure, chemically well-defined body, but is a variable mixture of phenol, cresylol, and more especially of guaiacol, cresol, and the derivatives of pyrogallol. This last substance is itself toxic. Guaiacol itself, the active principle of the creosote (Picot, Lepine, etc.), is much more easily tolerated; but, unfortunately, it is rarely to be found pure in commerce. Besides this, both guaiacol and creosote irritate the mucosæ of the stomach and the intestines, on account of their phenolated nature, and they sometimes cause a local irritation that renders their employment a matter of difficulty. Hence treatment with them must frequently be suspended in cases in which it is urgently indicated.

If we add that, in addition to this, their burning taste and strong odor are often unbearable to our patients, and that they greatly depress the appetite, we readily see how important it is from a therapeutic point of view to find a substance that does not have these drawbacks and still possesses the same therapeutic properties. This has recently been achieved by the production of the carbonate of guaiacol, which possesses the curative properties of guaiacol without its irritant effects. It does not injure the digestive functions, and it undergoes no decomposition in the stomach of healthy persons. In the stomachs of the sick, or in those where the products of decomposition are present, the salt is decomposed, and guaiacol is set free. This at once acts upon the bacteria, and rids the organ of these disease-producing agents. After a few days' use, therefore, the carbonate of guaiacol is no longer decomposed in such stomachs, and it is only in the intestines that it becomes split up into carbonic acid and guaiacol.

The nascent guaiacol arising from this decomposition is immediately absorbed without causing any irritative symptoms. It may be demonstrated in the urine half an hour or an hour after its ingestion. On account of the absence of toxicity and of any irritant effect upon the gastro-intestinal mucosa, the drug can be readily introduced into the circulation in sufficient quantities.

The carbonate of guaiacol is not toxic; so it may be given in large doses; but there is a definite limit to the therapeutic value of great amounts of the drug. Guaiacol acts in the diseased economy by combining with the tuberculin toxin produced by the pathogenic bacilli to form a sulphated compound; 0.5 to 1 gram (7½ to 15 grains) at the most is sufficient to neutralize the small quantity of tuberculin that is present in the blood, and to facilitate its excretion by the kidneys.

It has been demonstrated that guaiacol is not, strictly speaking, a specific for phthisis. Neither in the blood nor in the tissues does it kill the tubercle bacillus. The guaiacol that is absorbed does not remain free in the circulation; it combines with the sulphur of the tuberculin to form a sulphated compound. This compound has neither the corrosive action of the free guaiacol itself, nor has it any effect upon the bacillus of tuberculosis. Its effect is limited to the neutralization of the toxic products of the life action of the bacillus.

It has been widely held that both creosote and guaiacol have an action similar to that of the bitter tonics, and favor the secretion of the digestive juices. This is a mistake. The carbonate of guaiacol has the same property of increasing the appetite, to even a greater extent than creosote and guaiacol themselves; yet it has neither taste nor odor, and cannot directly excite the stomachic secretions, since it traverses that organ without being decomposed. This is shown by the fact that the appetite and the digestion are increased when guaiacol is injected into the thigh as much as when it is taken into the stomach.

In addition to its neutralizing and eliminative action upon the tubercular poison, and to its marked influence upon the general functions and upon nutrition, the carbonate of guaiacol possesses a specific action of its own, similar in nature to but more marked than that of creosote and guaiacol themselves. This specific action is shown in all cases by return of the appetite and improvement of the digestion.

Corresponding to the improvement of the general condition there is a substantial improvement in the condition of the lungs. The rales rapidly diminish, become less frequent, and may even disappear. The dullness decreases; and in certain cases, after several months of treatment, a cicatrization of cavities has been noted. The number of bacilli in the expectoration diminishes progressively.

To sum up, it is a neutralization and elimination of the toxines that occurs. The blood is permanently deprived of toxic products as soon as it is supplied continuously and in sufficient quantity with guaiacol; and the carbonate of guaiacol is the compound par excellence to effect this end.

Board of Health Proceedings.

NEBRASKA STATE BOARD OF HEALTH.

MEMBERS—Dr. C. F. Stewart, Auburn, President; Dr. B. F. Crummer; Omaha, Vice President; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.

THE Nebraska State Board of Health, at its meeting held September 20, granted certificates to the following:

William S. Fast (R.), Barada,
Northwestern Medical College, St. Joseph, Mo., 1893.

J. C. Hay (R.), Laurel,
University of Manitoba, 1895.

H. B. Strong (R.), Pender,
Detroit College of Medicine, 1892.

V. A. Thomas (R.), Nelson,
Jefferson Medical College, 1897.

W. R. Young (R.), Ansley,
Medical Department, State University of Iowa, 1893.

Owen S. O'Neil (R.), Omaha,
Baltimore Medical College, 1897.

Samuel L. Brown (R.),
Cincinnati College of Medicine and Surgery, 1884.

Digitized by Google

S. C. Brown (R.), Chapman,
Omaha Medical College, 1897.
Charles W. Thorp (R.), North Platte,
Gross Medical College, Denver, 1896.

The following were granted certificates at the session held October 7:

W. S. Wiggins (R.), De Witt,
Detroit College of Medicine and Surgery, 1895.
Benjamin Rea (R.), South Sioux City,
Indiana Medical College, Indianapolis, 1895.
A. Edgerton (R.), Omaha,
Medical Department, State University of Iowa, 1897.
Caroline Le M. Rolph (R.), Oakland,
Woman's Medical College, Chicago, 1897.
F. W. Kiesan (R.), Norfolk,
Medico-Chirurgical College, Philadelphia, 1897.
E. C. Henry (R.), Omaha,
Creighton Medical College, 1895; Medico-Chirurgical College, Philadelphia, 1897.
H. C. Babcock (R.), South Omaha,
Louisville Medical College, 1896.

Two protests were made before the Board of Health on September 20. One was against granting a certificate to H. A. McChesney, who graduated at the St. Louis Homeopathic School in 1890. This individual came to Nebraska City about six weeks previously and commenced to advertise in the newspapers and by handbills, making claims as only a genuine quack knows how. He had practiced for twenty years, had been connected with some of the largest hospitals of the old as well as the new world, and was a wonderful fellow, according to his ad. He guaranteed to cure incurable cases, and to work wonders. When he was put on the witness stand he showed considerable bravado, which, however, vanished when several letters were shown him, which gave him an insight to the fact that the State Board of Health knew a little more of his history than he supposed it knew. A letter was produced from the dean of his own school, which told that his alma mater was ashamed of him and would, if it could, withdraw its diploma. Drs. Whitten and Claude Watson, of Nebraska City, appeared before the board against him and many of the physicians of Lincoln, homeopaths as well as regulars, did likewise. A certificate was, of course, refused. It was the intention to have the fellow arrested as soon as he reached Nebraska City, but before this could be done he skipped to new pastures and "greener" fields. This is the same McChesney who was running a drug store at Chadron some years ago, and afterwards located in Osceola as a practicing physician. He was run out of Nebraska at that time, because he had no diploma.

The other case was a protest against granting a certificate to Chas. W. Thorp, a graduate of Gross Medical College, Denver, in 1896. While the evidence produced by the contestants was thought hardly sufficient to justify the board in withholding a certificate, it was certainly enough to make the gentleman interested to be anything but proud of the record he was making for himself in the first year of his medical practice.

Book Notices.

The Physician as a Business Man. By J. J. Taylor, M. D., Philadelphia. Published by the author.

Vaginal Hysterectomy; a Study of Sixty-six Consecutive Cases. By Chas. Gilbert Davis. Reprint from the Journal of the American Medical Association.

A Practical Treatise on Sexual Disorders of the Male and Female. By Robert W. Taylor, M. D. In one handsome octavo volume of 448 pages, with seventy-three illustrations and eight plates in color and monochrome. Cloth, $3, net. Lea Bros. & Co., New York and Philadelphia.

The Essentials of Obstetrics. By Charles Jewett, M. D., professor of obstetrics in the Long Island College Hospital, Brooklyn, N. Y. In one handsome 12mo. volume of 356 pages, with seventy-eight illustrations and three colored plates. Cloth. $2.25. Lea Brothers & Co., publishers, New York and Philadelphia, 1897.

The object of this volume is to place the essentials of obstetrics within easy grasp of the student. With this object in view conciseness and clearness have been consulted, even at the risk of the author being considered dogmatic; and a systematic and logical arrangement has been observed. While written for the student, the word student must not be taken in its narrow, but in its broad meaning. It is a work for students and practitioners as well. And for both there will be found much that is practical and instructive. It is a book not too large to be carried in the pocket, or thrown under the cushion of the buggy seat, and yet large enough to contain all the information the obstetrician will need, and will be a handy volume to have at hand to refer to in case of emergency. It covers the whole field of midwifery, but theories are left to more pretentious volumes.

Quite a little space is taken up with the exemplification of examination by external palpation, but not too much considering the importance of this method, which is not as often used in practice as it ought to be. This is pictured out to the eye by fine half-tone illustrations, which, with the concise description given in the text, will help the student to a more easy understanding of the subject. The author is evidently a firm believer in asepsis and antiseptics in obstetric practice, and full directions are given for carrying out these. And while no harm can be done by carrying out the methods described, they will be found very impracticable except in hospital work and in the families of the well to do. Some day the laity will be educated up to a belief in perfect aseptic childbearing, and when that time comes absolutely perfect asepsis in the lying-in room will be possible, but not before.

A short, concise, but good description is given of all operative procedures, even to symphysiotomy. To this new, or rather revived, operation the author devotes five pages. The work is in every way up to date, is complete, and will be a valuable addition to

Digitized by Google

the working library of the physician. It is well illustrated, both in color and in black. In the typographical arrangement a system has been followed which will materially aid the student in assimilating the material presented. The imprint of Lea Bros. is a guarantee that the mechanical part of the work is all that could be desired.

DOCTOR:

Your library is not complete without the **Hypnotic Magazine.** Cost of this handsome monthly, including premium book on SUGGESTIVE THERAPEUTICS, is only One Dollar ($1.00) a year.

THE PSYCHIC PUBLISHING CO, - 56 5th Avenue, Chicago.

DR. THEO. W. PEERS, of Topeka, Kan., says: I desire to report two cases in which I used Papine with very gratifying results. The first case was that of a man suffering with a non-operable case of epithelioma of the left side of the face. He had been operated on by a surgeon here, but on recurrence of the disease went to a "cancer doctor," who used a paste which "burnt" out a large amount of tissue and started up a very rapid growth of the tumor.

When he came into my hands, in October, 1895, the disease was so extensive that to make him comfortable was all I could hope for. Morphine, cocaine, and codein were tried, but with such distressing after-effects that they had to be abandoned. I then began using Papine, and two to four doses a day of a teaspoonful each kept him comfortable, with absolutely no unpleasant after-effects and with no increase in the amount given per day. The rapidity of the growth was decreased so that he lived until June, 1896, whereas, when I first saw him I did not think he could live three months.

The other case was one of probable tubercular peritonitis. I used it for six months with no after-effects, and always with relief to the patient. I know of no other anodyne that could be used for so long a time witout unpleasant after-effects and without increasing the dose.—Gaillard's Medical Journal, September, 1897.

A RELIABLE FOOD.

Messrs. John Carle & Sons, New York City—GENTLEMEN: I have received the "Nursing World Clinical Records" and samples of your Imperial Granum, although it was unnecessary to send the latter to acquaint me with its value, as we have a living example in our only son of the worth of Imperial Granum, and I have prescribed it constantly for eleven years, and always with the very best results.

Yours very truly, ——— ———, M. D.

September 2, 1897.

Clinical Records and samples of this celebrated food free, charges prepaid, on application to John Carle & Sons, 153 Water street, New York City.

PARKE, DAVIS & CO. SUPPLY ALL POTENCIES.

The ringing report in favor of the serum treatment of laryngeal diphtheria submitted to the American Pediatric Society, and the stress laid on the early employment of a potent and concentrated antitoxin, impel us to remind the readers of the WESTERN MEDICAL REVIEW that we have long been in position to supply every strength, from 250 to 2,000 units. The profession seem to lean by preference to doses of 1,000 to 1,500 units, but we can supply promptly all requisitions for a highly concentrated serum in doses of 2,000 units.

Our serum is rigorously tested and possesses, when it leaves our hands, a slight excess of antitoxic power to make good the loss of strength ensuing with age.

We furthermore particularly call your attention to the fact that our containers are glass bulbs hermetically sealed—not ordinary vials and corks. Dr. Geo. Duffield, in the Journal of the American Medical Association, March 6th, said: "I have found Parke, Davis & Co.'s anti-diphtheritic serum most efficacious. Apart from the potency of this brand, I must commend the ingenious manner in which it is marketed, viz., in hermetically sealed glass bulbs, which exclude the air and keep the serum strictly aseptic." Dr. B. H. Detwiler, in the Therapeutic Gazette for January, stated: "I prefer the anti-diphtheritic serum made by Parke, Davis & Co., as it is held in bulb tubes that are smaller in bulk, more convenient for use, more aseptic than the ordinary packages with corks, and the serum itself gives less pain in injecting." Dr. W. A. Walker, in Pediatrics, October, 1896, said: "I have used several serums, but have been best satisfied with the effects of that sent out from the biological department of Messrs. Parke, Davis & Co. I heartily approve of the way this firm now puts up the serum, in bulbs instead of in bottles." An editorial in the St. Louis Medical Era, January issue, affirms: "The antitoxin now offered the profession by Messrs. Parke, Davis & Co. is undoubtedly the safest and most reliable product on the market."

We should be very glad to have you write for our file of antitoxin literature, which includes interesting reports from hospital, municipal, and private practice.

Very respectfully,

PARKE, DAVIS & CO.

TO REMOVE TAN AND FRECKLES.

Soap will not remove tan nor freckles. Bathe the face in warm water and dry very carefully with a soft towel. Do not use soap on the face unless absolutely necessary. Never use face powder of any sort, it spoils the skin by closing the pores. If your child suffers from sunburn moisten the face at night with cucumber juice; cut a cucumber lengthwise and rub it on the face, allowing the juice to remain until it dries off; or use a mild solution of baking soda.—Mrs. S. T. Rorer in October Ladies' Home Journal.

I WISH to say that some time last autumn I was called upon by an agent of your company. He had practiced medicine, and called my attention to Antiphlogistine. I promised if he would leave me a sample that I would try it on the next case of pneumonia that came along. He generously left me two boxes. I very soon had a case of pneumonia, and kept my word. I was delighted with its action. During the winter was called to attend ten cases of pneumonia, in all of which I used Antiphlogistine, save one case. All recovered except the case that I did not use the Antiphlogistine. I am delighted with it in all cases of deep-seated inflammation, and it will take the place of poultices in my practice in the future. I seldom, if ever, write to any manufacturing chemist, but I do wish to thank you for this wonderful production, "Antiphlogistine." I have already prescribed a great deal and expect to continue using it (if God spares me) for many years to come. Very truly yours,

A. A. HOLMES, M. D., Harvard, 1865.

Bridgeport, Conn.

AN ANTIDOTE TO THE TWO GREAT SYMPTOMS.

The value of Antikamnia consists in its rapid effect in alleviating the suffering of the patient while more radical treatment is working a cure. While endeavoring to rid our patient of his neuralgia, rheumatism, typhoid, intermittent or malarial fever, we secure him relief from pain and intermission of fever. We have, in short, in this drug not a remedy for any disease, but a most useful antidote to the two great symptoms —pain and pyrexia.—Medical Reprints, London, Eng.

NEUROSINE contains no morphine, chloral, or opium, although it is the most powerful neurotic attainable. The standard remedy for the treatment of all forms of nervous disturbances. Anodyne and hypnotic. The most efficient and trustworthy agent for the relief of hysteria, epilepsy, neurasthenia, mania, chorea, uterine congestion, neuralgia, migraine, delirium tremens, asthma, spermatorrhea, and all convulsive and reflex neuroses. The remedy par excellence in delirium and restlessness of fevers.

SANMETTO IN CYSTITIS AND PROSTATIC TROUBLES.

Sanmetto yields uniformly good results at my hands. I have prescribed it in chronic cystitis of long standing, where the standard remedies failed, and effected a permanent cure. It is certainly ahead of anything I have ever used for enlarged prostate, and in fact for all prostatic troubles.

J. F. LAMBERT, M. D.

Farley, Iowa.

SANMETTO IN ENURESIS NOCTURNA.

Mrs. H. M. Robertson, M. D., of Middleport, N. Y., writing, says: "I have just received a letter from the mother of the girl to whom I gave the Sanmetto for nocturnal enuresis, and she assures me that her little girl has no more trouble of that kind, nor has had for some time, so thinks she is cured. I feel sure this case has been cured by Sanmetto, for it was an obstinate case, and did not seem to yield to anything before I gave her the second bottle of Sanmetto, although I had tried all the usual remedies. I believe in giving credit where it is due."

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

VOL II. No. 11. PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA. NOVEMBER 15, 1897.

Original Articles.

PULMONARY TUBERCULOSIS.—ETIOLOGY, SYMPTOMS, AND PATHOLOGY.*

BY EDWARD V. SILVER, M. D.,

SALT LAKE CITY, UTAH.

In writing a paper upon so important a subject as the one before us, it would be interesting, had we time, to go into the history of tuberculosis, looking backwards, as well as forwards, from the year 1882, when Koch announced his great discovery of the tubercle bacillus. The names of Martin, Boyle, Laennec, and Louis stand out as mountain peaks in the long list of investigators, up to the time of Villemin, who, in 1865, proved that the disease tuberculosis could be inoculated by introducing tuberculous material into the bodies of animals. Then came Budd, Tappeiner, Klebs, Cohnheim, and Fraenkel, each of whom added much to the general knowledge of the disease. To-day all positive knowledge revolves about the discovery of the tubercle bacillus as a pivot.

Tuberculosis is an infectious disease, caused by the bacillus tuberculosis, the primary lesion occurring in the great majority of cases in the lungs, producing pulmonary tuberculosis. Grawitz found tuberculosis of the lungs in 70 per cent. of all post-mortems, Schlenker, 65 per cent., and Biggs, of New York, 60 per cent. It would be a moderate estimate, then, to say that 55 to 65 per cent. of the human race, at some time in their lives, are affected by some tubercular trouble, and that two-thirds of these are pulmonary. Scientific research has proved its contagiousness beyond a doubt. It is an infectious, communicable disease, dangerous to the public health.

Etiology.—We distinguish two classes of pulmonary tuberculosis,—the acute form, often called galloping consumption, and the chronic form. The great majority of cases belong to the latter form, and of this alone shall we make mention.

Writers and practitioners of former generations readily accepted heredity as a cause for pulmonary tuberculosis. Our immediate forefathers, in fact, assumed that it was always inherited. Intrauterine infection is, however, believed to be an occurrence so extremely rare that it can hardly be regarded as one of the ways by which the disease is acquired. Suspected cases have been reported by such investigators as Bar, Lehman, and Renan. According to Squire, a predisposition or a tendency to tubercular trouble is handed down; he believes the family, house, and surroundings are more dangerous than the pedigree. Woodhead ranks heredity with such causes as defective hygiene in importance. Solly, of Colorado Springs, does not regard it as a cause, while Wilson, of Philadelphia, regards the doctrine of heredity as a stumbling block in the way of progress. Tuberculosis is rarely seen in foundling asylums; out of 71,370 inmates, there were but .4 per cent. deaths from that cause. In fact, hereditary transmission seems to be quite commonly doubted altogether.—(Virchow's Archives.) In infancy and childhood, according to Holt, the distribution of the lesions points almost exclusively to infection through the respiratory tract, following measles and whooping-cough, for instance, The lungs, however, according to Kossel, are often affected secondarily to the involvement of the cervical and bronchial glands. Sometimes this takes place by direct extension, sometimes by the ulceration of the same into a small bronchus, or blood-vessel, by which means the bacilli are rapidly disseminated through the lungs. It is a well known clinical fact that caries of the wrist joint is often complicated by pulmonary tuberculosis. Jacobi says, "frequently the primary seats of the affection in the young are the bones, joints, and lymph bodies." Infection through the alimentary canal is now believed to be common, especially among children, generally coming, according to Gerlach and Bollinger, by the ingestion of the milk of a tubercular mother, nurse, or cow, particularly the latter. The milk from a cow whose udders are tubercular is said to possess a virulence described as extraordinary. The most common disease of the cow is tuberculosis. If the flesh is not well cooked and is infected, the bacilli are introduced into the system and infection occurs. If the disease can thus be conveyed in milk and the flesh of these animals, it requires no argument to prove that careful investigation of cows and dairies alike is a necessity and should be compulsory by state law. In man, tuberculosis is not often transmitted by local infection or inoculation, though there are numerous well authenticated cases reported by Graham, Jacobi, White, and Hartzell. Syphilitic ulcers of the throat and larynx sometimes become infected by the tubercle bacilli, according to Rene Jacquinet. The disease generally remains local, and is not always transmitted to the lungs. Osler says briefly, that "inoculation in man plays a small part in the transmission of tuberculosis." Pulmonary tuberculosis may appear at any period of life, even in old age, though especially common in youth, between 20 and 30 according to Mays. Sex has no special predisposition to the disease. The negro is more susceptible to the disease than the white race.—(Wilson.)

*This and the two papers following were conjointly read at the meeting of the Utah State Medical Society, Salt Lake City, October 9, 1897.

Digitized by Google

Since the discovery by Koch of the tubercle bacillus, we are forced to the belief that to check the dissemination of the bacilli is to check the disease. Tuberculosis of the lungs results from the reception into a susceptible system of the tubercle bacilli. Such a system is furnished by a debilitated constitution, a catarrhal condition of the air passages, with feeble respiration. Everything that tends to lower the vitality, or, as it is said, affect the vital resistance of the tissues, such as overcrowding in work-shops, asylums, jails, with constant breathing of impure air, bad food, lack of sunshine and exercise, dampness, and exhaustion of all kinds; these all tend to lower the vitality of the tissues, reducing the activity of the phagocytes, thus allowing the bacilli to pass. The effect of "la grippe" upon the lungs, an unresolved pneumonia, a pleurisy which has not cleared up,—all these leave a "locus minoris resistentiæ; prolonged alcoholic excesses particularly; constant transgressions of the laws of health,—all these prepare the field for the ready development of the bacilli, but do not cause pulmonary tuberculosis. Mendelssohn reports nine cases where pulmonary tuberculosis developed after contusion of the chest wall. Sauvage believes that diabetes paves the way for tuberculosis, as it produces vital fatigue and diminished respiratory function.

Careless expectoration deposits the tubercular sputa upon the sidewalks, carpets, car floors, or ground. Here it dries and is caught up by the wind as dust, and is inhaled or deposited upon walls, ceilings, curtains, to be later breathed in by the unsuspecting. Nuttall, in 1891, in a case of Osler's, whose expectoration amounted in twenty-four hours to between 70 and 130 c. c., estimated the number of bacilli at one and a half to four and a half billions. According to the investigations of Comet, Landouzy, Lalesque, the dust from the floors and walls of a room inhabited by careless consumptives is infective, even though months have elapsed. Pulmonary tuberculosis is acquired by inhalation of the tubercle bacilli. Interesting and brilliant are the experiments which have abundantly proven this statement.

Wasserman gives the case of a healthy infant of nine days, taken to the house of a consumptive brother-in-law to the child's mother. For eight days the infant was kept in the room where the patient expectorated freely upon the floor. The infant was then removed to the mother's home. At the age of six weeks it became sickly and in five weeks died, the post-mortem showing advanced tuberculosis of lungs, liver, and kidneys. Still more interesting is the history of direct infection through the respiratory tract given by Reich. In a town of 1,500 inhabitants the obstetric practice was divided between two midwives. In none of the families had there ever been a case of tuberculous disease. In fourteen homes, attended by one of there midwives, no less than ten cases of tubercular disease of the lungs developed. On investigation it was found that this midwife was suffering with advanced pulmonary tuberculosis. It was her custom to remove mucus from the mouth of the infant by mouth to mouth aspiration and to establish artificial respiration by blowing into the child's nostrils. Similar cases are given by Bec, Maisch, and Cornet. Kissing by a tuberculosis patient might be given as a cause.

Dr. Mays, of Philadelphia, believes that the foundation of pulmonary tuberculosis lies, not in the tubercle bacillus, but in the nervous system in general, and in the nerve supply of the lungs in particular, and that any influence which weakens the nervous system also has the power of producing this disease. In his opinion, this view explains the prevalence of pulmonary tuberculosis among the nervous, the insane, and feeble minded. A depraved nervous system certainly does play an important role in the development of this disease, but to declare that pulmonary tuberculosis is not due to the tubercle bacilli is, to say the least, open to challenge. F. S. Parsons, of Philadelphia, claims that primary tuberculosis is primarily due to lymph stasis, congenital or acquired, and that the tubercle bacillus is the phenomenon expressive of the disease, and is symptomatic, not etiologic. Von Ruck takes exception to this, as indeed do most other investigators. Experiments on animals are now far too complete for us to believe this theory. As has been already said, it is the bacilli that cause the disease, and not the diease that causes the bacilli.

Symptoms.—The symptoms of incipient pulmonary tuberculosis are few in number, frequently not characteristic, or uniform. They are not sufficiently marked to attract the attention of the individual, and their significance may not be recognized even by the family physician, as there are other conditions which closely resemble those of the incipient disease; and yet, if incipient pulmonary tuberculosis is to be cured, its symptoms must be recognized early. The suggestive signs of chronic indigestion; flushed cheeks; rise in temperature of perhaps only one degree; anemia; scanty or suppressed menses in the female; dislike of fats; enlarged lymph glands; the small localized areas of harsh respiration at apex; jerky, cog-wheel inspiration; prolonged expiration, and a chest expansion of less than three inches,—all these are important signs, but are often overlooked or ascribed to malaria or typhoid fever. The sputa should always be examined in every case. If, at this stage, the symptoms are recognized, there is great hope for recovery. The disease is not recognized, perhaps, and it now assumes a more serious aspect, and symptoms easily recognizable appear. The classical symptoms—cough, with expectoration; loss of appetite and weight; hemoptysis—are symptoms of the advanced disease and not of the incipient stage.

As the disease advances, symptoms at first seemingly unimportant increase, and now new ones appear. The cough becomes harassing, day and night; the appetite becomes greatly impaired and digestion disturbed; hemorrhages take place from the lungs, at times exhausting, at times fatal; the debility augments, short breathing follows, and night sweats and hectic fever appear, signs, as it is now thought, of a mixed infection.—(Maragliano and Spengler.)

Digitized by Google

There are at times temporary improvement and a singular hopefulness seems to possess each patient, but relapses take place, and there is great emaciation. The cough, at first dry, becomes looser, the sputa thick and greenish in color, streaked with yellow and nummular in shape, floating in a thin serum. Examined microscopically, the sputum shows fragments of the lung fibrous tissue, pus cells, and the tubercle bacilli of Koch. Sometimes a rebellious diarrhea, chronic pharyngitis or laryngitis prove troublesome. A peculiar clubbed condition of the finger nails is often seen, in fact, is tolerably constant. One significant symptom is the heightened temperature, as shown by the thermometer. The rise in body temperature closely corresponds to the activity of the deposition of tubercle. The morning temperature is often higher than the evening, though the reverse is seen. In the last stages a subnormal temperature may be seen, even 93° or 94°. The pulse is increased in frequency, especially when the fever is high. It is often full, though soft and compressible. The tongue is usually coated, but may remain clean and red. A red line on the gums is usually seen at this time.

These symptoms go on for months or years, at times increasing, at times stationary or latent. The patient, however, continues to fail and a profuse hemorrhage, an intercurrent attack of acute tuberculosis, a pneumonia, an affection of the brain or intestines, or a perforation into the pleura, giving rise to pneumothorax, results in death. These symptoms, so interesting to all of us, aid us greatly in diagnosis, but do not give us the exact information as does the study of the physical signs.

We have once referred to the fact that pulmonary tuberculosis seeks by preference the apex, and is rarely limited to one lung, though generally so at first.

1. In the incipient stage a few scattered tubercles do not change the normal percussion note or resonance, nor specially alter the breath sounds; the deposit is soon, however, such as to impair the elasticity of the lung tissue, increasing its density, and a loss of clearness of percussion is found, together with a feeble, jerky, prolonged expiration. This dullness is readily seen, if the percussion is made while the patient holds his mouth open; a blowing sound in the subclavian artery is often heard; indeed, according to Hanot, this murmur is at times present before any other physical sign is discernible. Rales of various kinds may be heard at the upper part of the lung, both anteriorly and posteriorly. Flattening of the anterior portion of the chest wall is seen. The shape of the chest is suggestive,—winged scapulæ, long, narrow chest, and wide intercostal spaces.

2. As the infiltration advances, consolidation of course ensues; greater dullness on percussion; stronger vocal resonance; a sinking in of the side affected; soreness to the touch of the examining fingers; a harsh murmur, or distinct blowing respiration,—all these are now present to a varying degree. We may also have bronchitis and local pleurisies, with friction sounds and fine crackling rales.

3. The diseased lung now presents new symptoms. Portions become more indurated; other portions break down by a softening process; moist rales are found, and expectoration is free; cavities form; debility increases, as also the night sweats and hectic fever; over the cavities are heard cavernous voice, generally caught on expiration, and gurgling rales. In the same situation percussion gives a dull sound, or a tympanitic sound, or its varieties, cracked-pot, or metallic sound. The heart sounds may be heard with extraordinary clearness over a cavity at the upper part of the chest. Profound emaciation is seen and extreme pallor of face. Chills are also seen, probably the result of the mixed infection. Secondary tubercular deposits in other organs, as the intestines, give rise to annoying and, as has been said, fatal complications. Endocarditis is not uncommon. Fistula in ano occurs in 3 to 5 per cent. of all cases, according to Spellman. Such are, in brief, the symptoms presented by a case of pulmonary tuberculosis.

Pathology.—The time allotted for me will not permit anything but a brief description of the gross pathology. The action of the bacilli is a local one. Mixed infection usually takes place, streptococci and pneumococci being found as well as the bacilli of Koch, each class giving rise to special changes.—(Spengler.)

Tuberculosis of the lungs does not begin in different parts of the lungs at once, but in one or two circumscribed areas only, and, as has been said, in the great majority of cases, in one apex.

1. When the bacilli reach the lung by means of the blood vessels, the primary lesion is usually in the tissues of the alveolar walls, in the capillaries, the epithelium of the air cells, and in the connective tissue frame work of the septa. A process of cell division proceeds and the irritation of the bacilli produces the small miliary nodules. These undergo a change referred to below.

2. When the bacilli reach the lungs through the bronchi, inhalation bronchitis, a tubercular infection of the bronchial walls, takes place, and extends gradually to the periphery. A tubercular peribronchitis follows, as also superficial ulceration. Cheesy nodules form, at first gray, then yellow, blocking the small bronchi. The alveolar tissue of the lung does not long remain unaffected, but we notice small areas of the so-called nodular broncho-pneumonia. These later may become caseous. The alveolar walls are infiltrated and cavities form, from the destruction of the caseous and necrotic tissue. We thus have caseation, ulceration, and cavity formation. There are other changes which tend to healing, a sclerosis and limitation process. A chronic interstitial process is set up, near connective tissue, partly about the tubercular tissue and partly where destruction is going on, which leads to contraction and the formation of firm cicatrices. Sometimes a calcification in small cavities takes place. These changes are possible only where the new growth does not break down too rapidly; we see it, therefore, in the more chronic cases. The affected portions of the lungs may become so contracted as to be dimin-

Digitized by Google

ished one-half. Cavities and firm cicatricial tissue form the basis of such contraction. In too many cases, however, this process does not take place, but the disease, located in one apex, extends to lower portions of the lung; other bronchi become affected, or coughing carries the tubercular material into the trachea and larynx, and thence, by inspiration, into the other lung.

We may often find also simple inflammatory processes; acute inflammation occurs and a lobular pneumonia is set up. These are rarely extensive. A local gangrene may arise. Pulmonary tuberculosis may produce the most extensive destruction in one or both lungs in a few weeks or months, while in other cases the disease may remain quiescent for years, or progress very slowly.

DIAGNOSIS OF TUBERCULOSIS.

By ANDREW J. HOSMER, M. D.,

SALT LAKE CITY, UTAH,

OF THE KEOGH-HOSMER PRIVATE HOSPITAL; MEMBER OF WISCONSIN STATE MEDICAL SOCIETY, SALT LAKE COUNTY MEDICAL SOCIETY UTAH STATE MEDICAL SOCIETY, AND AMERICAN MEDICAL ASSOCIATION.

In the following remarks on the diagnosis of tuberculosis my object will be more to indicate a system of examination, of investigation, and of cerebration on the part of the examiner, bringing out some important points, and discussing briefly some of the more recent aids in diagnosing this ubiquitous malady, rather than rehashing the signs and symptoms laid down in text-books. To get these, I ask you to re-read our modern works, which give the classical signs and symptoms much more plainly and eloquently than I am able to do.

First, to arrive at a diagnosis, get the anamnesis. Let your patient talk; even though he bores you, pointers may be gained from the patient's history of himself. Now, with the patient's clothing removed, and with the cool, keen, searching, discriminating physician's eye, look at him. Is he symmetrical? Is he anemic? Is he cyanotic? Is his skin healthy or reddish-brown in color? Is the respiration rhythmical, thoracic, abdominal, slow, or fast? Is the heart-beat visible? Are the arteries pulsating, veins empty, full, or varicosed? Is he fat or lean, lost flesh or gained? Is there any edema, clubbing of the fingers, or incurvation of the nails? Is there enteroptosis? In fact, note all that is seeable.

Next, feel of him. Is skin hot or cold. Test his sensations. Is the tactile fremitus increased or diminished during phonation? Standing behind a patient, with thumbs in supraclavicular and fingers in infraclavicular space, one can judge of the relative expansion of the two sides. Are cardiac or aortic pulsations exaggerated? Can you feel the spleen, liver, or kidney?

Now measure him. What is his expansion, and is it greater on one side than the other? Next, percuss him; map out the heart dullness, liver dullness, and spleen. Are there dull areas over chest? Is stomach dilated and intestines normal? Ausculate your patient carefully, and if you have definite ideas of what you are after, and know sounds when you hear them, you have some foundation for thought.

Now, an examination of the urine, sputum, and blood is in order. When you have facts, such as may be gained by an examination indicated above, you are in shape to arrive at a conclusion. By exclusion, one thing after another is eliminated, and you have actually run down the enemy, know his habits and habitat, even if you are not yet powerful enough to slay him. It is easier to feel of the pulse, look at the tongue, pull down his shirt and listen to it rustle, and say, "I am afraid you have weak lungs," and then recall how that progressive proprietary pill house has just sent you a circular, telling the wonders of their anti-weak lung remedy. It is easier to let these houses do our thinking for us. Let me illustrate.

A few months ago a young man was sent to this city from an eastern state for his health, with a diagnosis of phthisis having been made by a number of medical men. He fell under the care of Dr. Plummer, who did not accept the other men's diagnosis, but undressed this young man and examined him. The patient was pale and might have been taken for a consumptive. The examination plainly revealed an enlarged spleen. The lung examination was negative. A blood examination exhibited to the physician the most beautiful pathological picture, to the poor patient the hideous visage of death. It was myeologenic leukemia, no signs of tuberculosis, and could not be, because they are never found together. What a mistake, a patient sent hundreds of miles to a climate good for tuberculosis, without the disease.

More text-book reading, more care in physical diagnosis, more honest thought, would avoid such serious mistakes, prevent suffering, and preserve the good name of our profession. Mix history, signs, and symptoms with brains, as Raphael did his paint, and people will be as willing to pay for our opinions as they are for his paintings. It is not my purpose to discredit the ability of our physicians. But, theoretically at least, we are well fortified with means of diagnosing tuberculosis, even in its incipiency; but, as a matter of fact, many directly under the eye of the physician pass this stage, and with it the line where help can be promised, and I wish to emphasize the necessity of more careful examination and more cerebration.

Inasmuch, then, as I am to be only suggestive and emphatic on a few important and recent points, I will not dwell upon ordinary advanced cases of chronic pulmonary tuberculosis, which are easily diagnosed. Even soon after the stage of incipiency, when there are plenty of tubercle bacilli in the sputum, there is no difficulty in diagnosis. To arrest the course of chronic pulmonary tuberculosis, the earlier the diagnosis is made and proper treatment begun, the better the prospects. Hence, all means for early diagnosis, though more difficult, should be well understood by the general practitioner. In phthisis, Koch's bacillus in the sputum and a diminished and roughened vesicu-

Digitized by Google

lar murmur under the clavicle are by many physicians considered the earliest positive diagnostic signs. The use of the centrifuge shortens and increases the value of the test for bacilli, first making a solution of the sputum with soda and potash.

A case with slight anorexia, tired feeling, slight loss of flesh, irregular temperature curve, with or without cough, and no other discoverable reason, look for beginning tuberculosis. Even before the tubercle bacilli can be discovered in the sputum or the dullness and bronchial breathing at the pulmonary apex heard, we have means of at least making a probable diagnosis and instituting a line of treatment which may prevent the development of further symptoms.

Testing the lung capacity is an aid in these cases. Hitchcock, from comparing a large number of cases, finds that in males from 16 to 40 years of age, for each inch in height the lung capacity is 3.5 cubic inches, and in women 2.3 cubic inches, using a water spirometer, which is considered the best. If the figures in the calculation do not reach this point, the lungs are in fault, or there is faulty breathing. The latter can be ascertained by the expansion. Even in early phthisis the lung capacity is generally much below the average given above; when up to or above this average, even with symptoms of pulmonary tuberculosis, is evidence against it.

The hypodermic use of tuberculin (2 to 4 milligramme dose) by its reaction is an aid in early diagnosis. However, at present it is used rarely, except in animals, where it serves a useful purpose, but even in them it is not uniformly reliable as an indicator. The reactionary symptoms are slight chill, fever, malaise, and headache. Besides, we have the local reaction in cases of pulmonary tuberculosis, as given by Dr. Charles Denison, of Denver, Colorado: "consists mainly in a harsh puerile, or an exaggerated broncho-vesicular breath sound, as heard with the stethoscope over the affected area. This is an exaggeration of what was heard before the tuberculin reaction, or it is heard in localities in which the breath sound was previously inaudible, or very different. It is not an evanescent effect, but usually continuous, though in a lessened or lessening degree during the whole course of treatment."

Dr. James T. Whitacre, of Cincinnati, in a recent paper, speaks very highly of tuberculin as a diagnostic measure and quotes a number of authorities to disprove Virchow's objection to it, viz., that tuberculin awakens tuberculosis from latent sources and disseminates the disease.

In pulmonary tuberculosis ordinarily, with the exception of fibroid phthisis, there is no cyanosis, no dyspnea, no enlarged right ventricle, as we get in other lung troubles. In tuberculosis with cyanosis, look for heart complications. Hemoptysis, occurring in apparent perfect health, has a tubercular origin. It is impossible to distinguish a simple from a tubercular broncho-pneumonia by physical signs alone.

In primary intestinal tuberculosis, we have persistent diarrhea, progressive anemia and emaciation, and enlarged mesenteric glands. Diarrhea in an ill-nourished child may be due to improper feeding, or may be tubercular.

In children, polyadenitis gives a suggestion of tuberculosis, but even in cases quite well advanced we cannot be positive from the glandular condition alone. A consideration must be carefully taken of all signs and symptoms in these cases. A child with variable appetite, having alternate diarrhea and constipation, a red line on the gums, anemic and pale, flabby skin and bronchitis, a palpable, freely movable, hard, not adherent chains of glands beneath the skin in the clavicle region under the jaw, behind the ear, in the armpit and groin, is a case for a complete investigation. In impetigo, the adenitis is more local, occurs suddenly, and may suppurate. In syphilis, such general adenitis is rare. Next to adenitis the bones are most frequently involved, and the favorite location is in long bones near the epiphysis and due to the occlusion of a small artery by a tubercular embolus, making a conical infarct or sequestrium and followed by so-called tubercular pus. The symptoms of acute miliary tubercular osteo-myelitis are not so different from pyogenic osteo-myelitis, except it is not quite so rapid in its destructive process, not so much pain, and not diagnosed so early or getting so early treatment.

Tubercular joints in children at least usually first occur in the adjacent bone, but a primary synovial tuberculosis occurs in adults. Everyone should be able to recognize so-called fungus granulation tissue. The tubercle bacilli act as specific irritants and produce this peculiar fungus growth, which dissolves everything in its track. Even the hard head of a bone will yield to its pressure. In the body there is no tissue that is exempt from tuberculosis, so I will not attempt to give diagnostic points in all.

Miliary tuberculosis is oftenest produced by self-inoculation, auto-infection, coming from a pre-existing tubercular focus. Long standing, deeply located, concealed lymph nodes, like dynamite, may explode, and in a few weeks an autopsy may be held to clear up the diagnosis. The bronchial lymph glands are oftenest the source. Very often, in the University Hospital, Vienna, I have seen Kolisko demonstrate so beautifully how the rupture of an old tubercular suprarenal gland into the suprarenal vein, from thence to the ascending vena cava and right heart, where with one systolic contraction both lungs are as effectually seeded as is the receptive soil after the farmer has scattered his grain.

The symptoms following such a rupture are so similar to some of the acute diseases that mistakes are usually made. As a rule, bacilli are not found in the sputum, no suppurative expectoration. There is fever, slight or no cough, anorexia, etc., frequently resembling typhoid or malarial fever or meningitis, and such a diagnosis is often made and buried forever with the patient.

Another way in which general miliary infection takes place is by an overflow of the lymphatic system, when the infection is not confined to the nodes. Children may have for a long time latent glandular

Digitized by Google

tuberculosis, but because of the great functional activity of these glands, phthisis is not developed early. The lymphatic glands act as filters, but when the filters are all clogged an overflow takes place. A differential diagnosis is based on the persistence of the atypical fever without a local cause; later dyspnea, cyanosis, and meningitic symptoms occur. If there has been evidence of an old tuberculosis, it aids in coming to an intelligent opinion. The bacilli in the sputum and discovery of tubercle in the choroid confirms the diagnosis. The diazo-reaction, enlarged spleen, rose spots, meteorism in iliac fossa, and bowel symptoms may be found in either typhoid or miliary tuberculosis. Leucocytosis is in favor of tuberculosis rather than typhoid. The local symptoms are those of miliary bronchitis, yet not so sudden, cough not so severe, while the cyanosis and difficult breathing are greater.

When one has failed in making a diagnosis from signs and symptoms and when the culture media and microscope do not show the bacillus, we have yet two methods left us for investigation. I refer to inoculation experiments on the lower animals and blood morphology. In some sputum and other discharges, and in so-called cold abscesses, the culture media and microscope do not show the bacillus, while inoculation experiments succeed. "The spores, when planted in the living animal, show their specific peculiarities."

The New York Medical Journal, in commenting upon Villemin's method of subcutaneous inoculation of tuberculous matter as a means of diagnosis, calls attention to the fact that hunting for the tubercle bacillus in specimens in which the bacilli are scant is a long, tedious, and discouraging search. "Professor Delephine has found that products containing even a small number of tubercle bacilli will, when inoculated under the skin of the inner aspect of the leg of a guinea pig at the level of the knee, cause tuberculosis in a certain number of organs in the following order: During the second week, of the lymph nodules on the same side of the body below the diaphragm and the spleen; during the third week, of the liver and of the mediastinal and bronchial ganglia; after the fourth week, gradual infection of the lymph nodes of the opposite side of the body below the diaphragm. He concludes that the inoculation method is a diagnostic measure capable of giving results that are free from any ambiguity, and that the negative results that may be obtained by it are nearly as valuable as the positive results, while the latter give more definite information than the discovery of the bacillus tuberculosis in the matter examined. Results should be obtained within two or three weeks after inoculation.

Blood.—There has been considerable investigation of the blood in this disease, but not sufficient yet to be of much practical importance to the general practitioner, unless he is a blood expert. However, any physician can make a blood film.

Two cover glasses are needed. They should have been immersed in equal parts of alcohol and ether for twenty-four hours, perfectly dried, and polished. The ear or finger of patient washed in alcohol and punctured with an aseptic small knife or needle. The first drop of blood wiped off. Then holding a cover glass with forceps, touch with the middle of the glass the apex of the following drop (not letting the glass touch the skin). Now drop the first glass upon the second, never making pressure. Separate them now by pulling them suddenly apart in parallel planes, allowing them to dry blood side up. They can be sent in any small box by mail.

O. Strauer has made experiments to differentiate between cancer and tuberculosis. While in tuberculosis accompanied with anemia there is diminution of the red corpuscles, the dry constituents of the blood, and the specific gravity, it is not nearly so great as in cancer. In tuberculosis the anemia (diminished hemoglobin and red corpuscles) is not so great by actual test as the pallor of the patient would indicate. In cancer leucocytosis is more pronounced. The greatest difference, however, is in the form of the red blood corpuscles. In tuberculosis the red corpuscle remains the same in form, while in cancer poikilocytosis is marked. If one finds a red blood corpuscle with nucleus (erythoblast), one can say surely that it is carcinoma and not tuberculosis in differential diagnosis.

In pneumonia, directly after the chill, one finds pronounced polynuclear leucocytosis, thick fibrin network, no eosinophilic cells, diminished chlorides in the urine, except in septic pneumonia there is no fibrin network and not such pronounced leucocytosis; while in tuberculosis the quality of the blood is not so changed, but the quantity is diminished. In the first stage of tuberculosis we have practically, to the ordinary observer, normal blood; second stage, chlorotic blood; third stage, almost typical of its frequent associate, chlorosis.

In bronchitis and emphysema the eosinophilic cells are increased, while in tuberculosis they are usually diminished or absent. Diplococci and tubercle bacilli are friends and often found together, and when diplococci are in the system there is never an eosinophilic cell found. This is why this form of blood corpuscle is so often absent in tuberculosis, and for that reason aids in differential diagnosis. In emphysema also there is polynuclear leucocytosis, not so pronounced in tuberculosis.

Gout and tuberculosis are opposites. One rarely finds tuberculosis with a uric acid diathesis. One never finds in a tubercular patient's blood perinuclear basophilic granules, which are by Nensser considered evidence of uric acid diathesis. In myeologenic leukemia there are in the blood perinuclear basophilic granules found, and this disease is never found associated with tuberculosis.

Dr. A. M. Holmes, of Denver, has been studying the blood in tuberculosis quite extensively the past two years and now claims to be able to make a diagnosis earlier than by any other known means. He says there are changes in the white blood corpuscles, which are the tissue formers, long before there are changes in the organs themselves. In order to understand these changes one must know the histology of the leucocyte, the relative proportion of the different

Digitized by Google

kinds of leucocytes, viz., lymphocyte, splenocyte, polynuclear leucocyte, and eosinophilic cells. He must also know the action of the different structures of these cells to stains in health and disease. Because he bases his diagnosis upon the change in the relative proportion of the leucocytes, upon their change in outline, upon whether the different elements of the cell structure are neutrophile, oxyphile, or basophile, brought out by the effect of acid and basic stains, as well as by other changes, all of which can be studied only by the one-twelfth inch oil immersion. He states that "the law that brings about disintegration in the larger organism has already brought about the same process in the leucocyte at an earlier date." Hence, by studying this leucocyte one can recognize the disease before there is any change in the larger organism.

My investigations in this line, which have been limited, tend to confirm this opinion, but I have not done sufficient work to make positive statements, and the question arises in my mind whether similar changes might not occur in other wasting diseases. Further study is necessary to decide all points connected with this important subject.

THE TREATMENT OF PULMONARY TUBERCULOSIS.

BY GEORGE H. PENROSE, M. D.,
SALT LAKE CITY, UTAH,
MEMBER SALT LAKE COUNTY MEDICAL SOCIETY; SECRETARY UTAH STATE MEDICAL SOCIETY, ETC.

The subject assigned me is, as you know, the treatment of pulmonary tuberculosis. You have heard what my colleagues have said concerning its etiology, its pathology, its diagnosis, and its symptomatology, and now we come to that vast field, its treatment. This has been so thoroughly covered by our current literature that I have confined my remarks to but a few points which to me, through personal experience and study, appear the best and most scientific.

I would first call your attention to the very great importance of an early diagnosis, for I believe there is no good reason why so many of our tubercular patients should go on to a fatal termination, except that so few cases present themselves till the disease is well developed, or to the fact that the incipiency of the disease has failed to be recognized as such by the attending physician.

The clinical history is the most important simple guide we have and one that can always be made use of by every physician, while to be able to perfectly outline a diseased lung in the early stages can only be achieved after long practice and hard study. In cases of doubt I believe we have a most reliable diagnostic remedy in tuberculin.

The character of the food, especially the meat and milk, should have the strictest inspection, not from men whose political party has placed them in office, but by competent persons whose early education prepares them to pass judgment upon such important questions.

Bed clothes should be frequently aired and exposed to the sunlight; the room cleaned with a damp cloth and frequently aired; the windows wide open to allow the sunlight to enter. No one should occupy the same room with a tubercular patient, for I would place tuberculosis in the same schedule of infectious diseases as scarlet fever and diphtheria, requiring every case to be reported to the board of health.

Those predisposed to the disease should lead an active outdoor life, should breathe plenty of pure air, both day and night. Food must be wholesome, and strict punctuality as to meal hours is essential. Stimulants, as a rule, are not required. Change of climate, in the early stage, is most beneficial, and we may summarize such under the following headings: (*a*) Sea voyages; (*b*) mountain resorts; (*c*) seaside resorts; (*d*) dry, sunny climates; (*e*) moist, warm climates, each of these being best for a certain class and only determined by the individual. Of all measures adopted none can be successful unless the hygiene of the patient be most rigorously carried out.

Upon a patient presenting himself, giving the history of tuberculosis, have him placed in bed for three days while making your examination of lungs, blood, and kidneys; note the temperature every three hours, with pulse and respiration. You are then ready to determine the best line for that particular case.

They should be allowed to be up and in the fresh air while the temperature is normal, and take as much exercise as possible, free from fatigue or shortness of breath. If the temperature registers 100 or above, order them to bed at once and keep them there until the fever disappears—fever rarely requires treatment; if it does you can select from between phenacetin, acetanilid, or ammonol; especially do I recommend the latter.

In our search for a suitable treatment two propositions at once confront us as to the growth and life of the bacilli: First, we have a group where the germ life continues to manifest virulence for an indefinite time. They may be situated deeply or superficially; confined to small cavities or extend over large areas. These germs elaborate chemical poisons for indefinite periods. To cure such the germs must be killed; hence our powers must be directed to increase the normal resisting powers of the animal body.

In our second group we find:

1. The germs live in the body but a short time.
2. Are located superficially in the mucous membrane or under the skin.
3. Are confined to small areas.
4. In a few days the germs pour into the system a chemical poison, then the bacteria cease to manufacture poisons. They are acute intoxications. Such diseases are diphtheria and tetanus, and we find the antitoxins produce a cure.

The serum therapy of Paul Paquin and tuberculin we pass with the mere mention; they have been tried and I believe have failed as a general rule, from one cause or another.

Working upon the theory of producing a state of the system whereby the tissues are able to withstand the inroads of germs of the first group, we have the treatment by creosote and its derivatives, and the yeast

Digitized by Google

nuclein of Vaughn; on the other basis we have antiphthisin and the serum of Maragliano, and yet in the dawn of the possible, the last work of Koch.

As to yeast nuclein—chemically it is a proteid body, especially characterized by the large amount of phosphorus it contains. We find that yeast nucleinic acid subcutaneously injected increases the number of white blood corpuscles; that the increase occurs principally in the polynuclear cells, and that this increase occurs in health as well as in disease about three hours after being introduced. The dose of yeast nucleinic acid, 1 per cent. solution administered hypodermically, is fifteen minims once a day and increased two minims each day up to forty-five minims. It is best to have a syringe with a small barrel. The injections being made in any part where muscular tissue is present, probably the infrascapular areas are the best. The syringe should be kept in 5 per cent. carbolic solution, and you should have a needle for each patient, those supplied by Parke, Davis & Co. being very satisfactory. You must bear in mind while giving the nuclein that you must not give quinine or any other of the coal-tar derivatives. Atropin is a physiological antagonistic, and should not be given for the night sweats. Here let me say a word concerning night sweats. I believe they are an unnecessary bugbear; I do not believe, unless they be of the most violent character, that they require special attention.

We next come to that line of treatment, the large and curative doses of which I had the honor of being the first to advocate—creosote.* At the time of beginning my experiments I disagreed with Beverly Robinson, Sommerbrodt, and others, that creosote could not be given in large doses; how well my grounds were taken has been proven by time. We only get good and permanent results by giving this drug in large doses. In order to do this two requisites are necessary: First, that the drug be pure; second, that by gradually increasing the dose you prepare the stomach to receive the large quantities necessary. I hold that the stomach will not be disturbed if proper precautions are used, such as I have advocated. It is best given in a freshly prepared emulsion of cod-liver oil, or, if you can, drop it on the yolk of an egg; or, if the conditions require it, in whiskey and nux vomica.

Carbonate of creosote or creosotal contains 92 per cent. of purest beech-wood creosote and 8 per cent. carbon dioxide, which may be given in five drop doses three to six times a day, and this increased from forty to sixty drops. Again the carbonate of guaiacol, which contains 91 per cent. C. P. guaiacol and 9 per cent. carbonic acid, the dose being thirty to forty grains a day. And yet later on we have had offered to us the benzoate of guaiacol. There appears to me to be little difference in either of these preparations, the guaiacol carbonate and benzoate can be administered in capsules and are more agreeable of administration.

Just how creosote acts has not been fully determined, but I place it in our first class, as it appears to render the soil unfit for the growth of the bacilli.

As to the results of administration, we see in most every case increase of the appetite, increase of weight, decided decrease of cough, the night sweats become a thing of the past and the number of bacilli decrease most markedly—in several of my reported cases they have entirely disappeared after most diligent search of many fields. The physical signs often show marked improvement, the coarse mucous rales disappear, breathing loses its bronchial character, and cavities have shown a decided contraction.

Upon a second theory of directly destroying the bacilli, we have had given us through the untiring energy of Klebs and Von Ruck, the purified tuberculin or antiphthisin. This is prepared by taking the ripe cultures of the tubercle bacilli as grown in a liquid media and reducing it to one-tenth of its original bulk, by evaporating in a vacuum and filtering; this filtrate is the tuberculin of Koch. To this filtrate we apply an acid solution of sodic iodide of bismuth and obtain a precipitate, which is filtered out. The filtrate represents the toxic properties of tuberculin. This filtrate is now taken, and after the toxalbumins have been filtered out, it is further precipitated by the addition of absolute alcohol and an organic substance resembling in its chemical characters a peptone is produced. This substance is redissolved in distilled water, and antiphthisin is the result. To this is added one-fifth per cent. orthokreasol for preservation, forming a clear liquid. The dose of antiphthisin is one-tenth of a cubic centimetre, hypodermically administered, daily, and increased by a gradual method till one or two centimetres are used daily. The substance being an albuminoid, cannot be given by the mouth. With antiphthisin there is no reaction as a rule, and the curative properties, as far as reported, are such that we should bear it in mind, and as occasion arises give it a thorough trial. In the examination of the sputum of cases taking antiphthisin it is noticed under the microscope that the bacilli become granular and dumb-bell in form, appear more and more in fragments, and stain imperfectly; I have found this same thing while the patients have been under creosote.

I would also call your attention to the benefits which so often are derived from the use of the pneumatic cabinet. It develops the muscles of respiration, causes portions of the lungs to expand which otherwise remain dormant, and more absorption is produced,—all important factors in the treatment of tubercular trouble.

To sum up, I would say that pulmonary tuberculosis which has progressed to cavity formation will not be cured, but that much may be done to mitigate suffering and prolong life. So long as there is no secondary infection with pyogenic germs, I believe the treatment as above outlined will relieve the disease, and at times cure it. I further believe that in the early stages, if taken in time and properly treated, the large majority of cases can be arrested; but the hygienic, the climatic, and the medicinal measures must be carried out in all their minuteness. Patients must give themselves up to their physicians entirely.

*New York Medical Record, April 9, 1892, p. 102.

Digitized by Google

The treatment of the several complications I cannot even touch upon, but let me just speak of severe pulmonary hemorrhage, and offer this prescription:

Ergotin	gr. lxxv.
Morphia sulphate . .	gr. j.
Antipyrin	gr. xx.
Spartine sulphate . .	gr. iij.
Atropia sulphate . . .	gr. $\frac{1}{30}$.
Distilled water . .	℥ viij.

Of this take thirty drops and inject deeply into the muscles of the back, repeating in half an hour if necessary.

I would caution you about checking cough too rapidly, unless it be caused by mucus in a large cavity, when surgical measures should be undertaken and drain established as in other abscesses.

Such, gentlemen, I believe covers the latest accepted means at our disposal of treating tuberculosis. You will appreciate the fact that, being limited to 3,000 words, I can only outline the methods of treatment, and must necessarily omit much of vital interest, if not of necessity.

SCHOOL HYGIENE.*

BY SOLON R. TOWNE, M. D.,
OMAHA, NEB.

With the acceptance of the theory of evolution in science and of the germ theory there open up vast possibilities in the line of preventive medicine. Wherever men congregate, there also the state appears, through the exercise of its police power, to bestow upon the community the benefits of special knowledge. In addition to the immediate good accomplished here is exemplified the educative force of law. Thus doubly valuable is the intelligent application of our thinking to our school system, securing to the pupil not only his present physical well being, but fitting him also for good to his future environment, resulting in the most perfect citizenship. The teacher, no longer simply a leader in mental gymnastics, becomes a character-builder, by methods scientific enough to detect and supplement the shortcomings of the home, and produce for society a well rounded citizenship. Allow me, then, to present a few practical suggestions on "School Hygiene."

First, as to location. In the country especially, a southeast slope is far preferable, helping to avoid cold winds, wet weather ponds, and all dampness; a wind-break may help in forming shade, but shade should never be dense nor prevent at least an hour of clear sunshine upon all ground near the building. Plenty of room, in town or country, for playground, with all the blue-grass lawn possible, should always be secured, even at the expense of a few minutes' walk extra for requisite conditions. Nothing is more essential for vigor of nerve and muscle for boy or girl than open air play. Just as essential is it to the making of good citizenship, be it on the plains or in the slums of Chicago or New York.

Water of decided purity must be secured without that abomination, the open, shallow well. In Wisconsin five only out of every hundred school wells examined were usable. The well should be bored or driven fifty feet or more in Nebraska, to secure filtration and nitrification, nature's method for destruction of germ life and breaking up of dead organic matter. Of course, it should be away from all surface drainage and should be the object of scrupulous care.

The two widely separated privies, with a walk to each, should not be supplied with the ancient vault, but if a sewer is out of the question the dry-earth closet is the only method to be considered. This is simplicity itself: barrels of dry road-earth, sand, or ashes, shovels, with half-barrel receivers, to be emptied when full without fail. Nothing pays better than scrupulous cleanliness here, secured by attention of janitor and teacher if required, with frequently renewed surface of walls.

Upon the school building itself much thought should be expended, with the advice of expert authority, that plans may suit the case, but above all that it should be healthful in all its makeup. Might not the State Board of Health have veto power in so essential a matter?

Store room, two cloak rooms, and a piazza are necessities. A clean, dry basement, if site is suited to it, will serve as playroom in inclement weather and insure a dry assembly room. In any case this space needs thorough ventilation to avoid filth, ground air and dampness. Cloak rooms are mentioned; damp outer clothing, with its varied personality, is a nuisance in the assembly room. But if in ventilating, the outward current pass through the cloak rooms at 70° F. it will dry and air outer garments, and also allows disinfection when desirable.

Ventilation.—To supply 2,500 cubic feet of pure air to each pupil hourly without draft is a problem requiring not only thought but expenditure of force and money, yet brings in the choicest returns in vigor of body, mind, and morale of school.

In larger buildings air-furnace methods are very uncertain and unsatisfactory, either in distribution of heat and oxygen or in removal of foul air. So much is dependent on outside atmospheric conditions that lengthy air currents are refractory subjects for control. To be in any way successful much greater care and expense in number of fires is demanded. And again, especially in extreme weather, air is so liable to overheating, with loss of part of its oxygen. Steam, on the other hand, quite easily and certainly distributes its heat, with one central fire using cheaper fuel, never overheats the air, which is introduced to the radiator very near where wanted. A sixteen-room building in Omaha is run at half the expense of a similar sixteen-room with the hot air method (Smead's—now removed), with better results in purity of air and evenness of temperature. The central boiler, with four direct-indirect radiators (direct in halls seldom used), for sixteen rooms, has done satisfactory work. But quite as satisfactory are the plenum and vacuum fans for producing current, the

* Read before the Medical Society of the Missouri Valley, Council Bluffs, Ia., September 16, 1897.

Digitized by Google

exhaust steam from the small engine needed being utilized to heat the fresh air. A three-story, twelve-room building remodeled with this method, the space below ceiling in halls being utilized for horizontal shafts, and a small direct radiator put in each room, gives eminent satisfaction. The agreeable freshness of air is noticeable in this building, the abundance of oxygen makes 66° to 68° F. comfortable against 72° to 75° F. by other methods, where "stuffiness" is frequent. The expense is only slightly increased, though fitted to an older three-story building. A radiating object in the room may be more physiological than warm air, especially for wet feet.

For best results in the country with a stove the heater should be very large, for economy of fuel and to secure circulation. It should be in the corner of the room, surrounded with a jacket for producing current, letting in cold air about its base in amount to be adjusted to the weather. The outlet should be large at or near the floor, through the cloakroom to the shaft heated by the chimney, or without cloakroom, through an enclosed space under the floor to the shaft. This method succeeds and allows the schoolroom to breathe. A tile stack inside a two or three-foot brick shaft works well.

The schoolroom should be rectangular, furnishing fifteen square feet floor space and one hundred eighty cubic feet air space to each pupil.

The windows, equalling one-fourth the floor space in area, should be in the rear and to the left of the pupil, principally the latter,—this may be the south side of the building, but if too bright should be thinly shaded with green. Windows to be quite high, approaching to overhead light, and adjustable.

Blackboards must be to the front and right of pupil, opposite the light.

Desks should be adjustable, especially in the country school—the seat, that the feet may rest flat upon the floor, and it should rise well toward the front under the lower thigh that pressure on the tuber ischii may not be constant. The back should not allow the reclining position of the pupil. The desk top should come up to easy reading distance from the eye of the pupil, and not allow the curve or stoop of the neck.

Frequent change of position and employment should be allowed, especially the younger pupils, to avoid undue strain upon the eye, the muscular system, or the brain. Continuous strained positions, even such as lying constantly upon one side at night, or continued one-sided effort, tend to deformities in young children.

Cleanliness is a relative term, but getting nearer to godliness year by year. Something approaching modern surgical methods should apply to the schoolroom. It will never be as contagious, however, as measles. With modern floor-oils or dampened waste and brush, sweeping should be dustless, and daily dusting become damp, antiseptic rubbing. Furniture and utensils should be treated often, while each pupil should touch only his own utensils.

The recess has been said to unfit the child for study or thought. This can hardly be true generally. Exceptionally active children may need restraint, but most schools, even with the best of ventilation, will do better work with short hourly periods of some play or drill in open air or with open window, active enough to cause deep breathing and the resulting blood change.

Physical education in the United States is yet in its formative period. Given an established method and no doubt, like Chicago and her art, we will "make it hum." Meanwhile let us utilize some imported system. Of ninety-three men associated with the class of 1872, Dartmouth college, the only class having systematic drill for full course, ninety are living today, two having died from overindulgence, and one, who was excused from this exercise, has died of phthisis. There was not a gymnast in the class. But regular exercise did much to establish health, I believe, in the formative period of life. In childhood activity should show itself in play. East side children in New York, who play in the street, excel in grace, carriage, dexterity, the more favored fashionable neighbors who have no such opportunity. The teacher may guide, suggest, or participate, but should never frown away spontaneity. Later, systems may be introduced, but specialism should not take the place of group work, except for deformity. An expert, indeed, may inspire others, but harm himself. Military drill does teach order and discipline, but is nearly valueless physically. Our West Pointer gets his physique, his carriage from "The Gym," not from the manual of arms. Whatever the system, its aims, grace, vigor, dexterity, health, are all essentials of activity, without the exercise of which for self, and particularly for others, life is not worth living. But the moral results of group play are great —attention, energy, cheerfulness, self-reliance, the social sense. The tone of a district in the slums changes rapidly with the introduction of playroom. The vacation schools of New York of this season, where singing, dancing and gymnastics, sewing and carpentering, drawing and clay modeling, were "played" was a boon to six thousand east side youth. Expensive! It cost less than five cents per pupil. How about the economic value of a well trained, well disposed, active, long life? How about the safety of a state having a large proportion of this sort of citizens?

I believe in the motto "multum non multa,"—know much, but not too many things. Our schools attempt too many things. While training the mind, why not train in the line of future usefulness, aiming to fit for home life and to give character as well as smartness? Why should a state teachers' association condemn a law requiring physiology in the public schools? Shall we put a most delicate machine—the human frame—into the management of a child without careful instruction as to its uses and abuses? What shall we say of a system that puts the child through fifteen years of drill and gives him absolutely nothing he can use in making a home? Why not study sanitation, food and cooking, clothing and its preparation? Why

Digitized by Google

place in the new home a third innocent—the most dependent thing on earth, and leave the parent in ignorance so absolute concerning its needs?

Again, are we not as a nation giving too little attention to education through the hand and too much in proportion to eye and ear? It is the boy from the farm that has succeeded in the century past. Ninety-five per cent. of the heavy men of Boston were thus reared. Their contact with things, overcoming difficulties with their own hands, was a large factor in giving them brain power. The history of our race—of primitive man—was necessarily of this sort, while books, and thought through the eye and ear, are of this century for much of our race. Should not every child repeat this life history of the race in much greater measure? Brain made after this method is, I believe, far more capable of great achievement. And in this age of machinery, so little handiwork required, Sloyd has a still greater gap to fill. We have to fear lest this age of lack in physical development give us a race nervous, emotional, but without stamina to solve the great political, social, or moral problems of our time.

You ask how to meet these difficulties. One has recently asked: "Who to-day is responsible for healthful conditions in the school?" We certainly could not expect every young girl teacher to be liberally educated in medicine. No; but the holding of a teacher's certificate should imply a knowledge of hygienic principles.

All health officers in cities should consider the school the object of their special study and care. From five years' experience with contagious diseases I believe such care of school a most essential element in their control. Said Dr. Fowler, of New York, after a month's trial of school inspection: "We've found the leak." Then so much can be done in noting and getting corrected all sorts of individual deficiencies and deformities in children from poor or neglected families.

State boards, by continued agitation, issuing special matter through superintendents to each school, can accomplish much, both immediately and in an educational way.

Teachers' institutes should be instructed by physicians particularly interested and practical in hygiene. County inspectors, medical men perhaps, with a knowledge of hygienic minutiæ and some authority, would make a most admirable factor, though perhaps not practicable at present.

Meanwhile we of the medical profession, realizing the deficiencies and the possibilities before us in this field, should interest ourselves as never before. May I bespeak, gentlemen, a more intimate relationship between the pupil in school and the medical profession?

DISCUSSION.

Dr. Emmert, Atlantic, Ia., said that the subject of the paper was one which physicians ought to be more interested in than they seemed to be at present, especially those who have children. None knew better than physicians the grave results which come from unscientific methods and unhygienic surrounding of schoolroom. He thought the slates ought to be relegated to where they belong—the past, and the filthy sponges with them. The indiscriminate use of pencils, as seems to be the fashion now, is quite liable to, and often does, cause the spread of diseases from being placed in the mouth. The common tin cup, too, is filthy, and ought to be done away with. The author did not bring out as fully as he might the great value of ventilation. The breathing of devitalized air conduces very much to the development of consumption, as well as general weakening of the constitution. No system is perfect that depends upon the teacher to regulate, and especially if left to janitors. Automatic regulation is what is needed. He believes that instead of building more three or four-story buildings, all of these ought to be pulled down, and limit them to two stories. Then we would have less gynecological cases. The development of body and mind should go together, the former being as important as the latter. All head is well enough in the cabbage, but we do not want to turn out cabbages.

Dr. Bartow, of Council Bluffs, presumed the writer did not intend to cover every phase of school hygiene, such as calisthenics. It was too broad a subject to cover in one paper. He was certainly in favor of more calesthenics in the schoolroom.

Dr. Mary Strong, of Omaha, thought that much good was being accomplished in various ways, but there was much yet to be done. If we could have intelligent, conscientious men to look after the school buildings in our cities, to take the place of politically chosen janitors, it would be an improvement.

Dr. F. S. Thomas, of Council Bluffs, thought that there ought to be more attention given to lighting the schoolroom. There certainly must be serious defects in this regard when only 2 per cent. of those in the younger grades have myopia, while 20 per cent. suffer from this trouble in the higher grades. There should be more recesses for the younger grades, forty-five minutes being plenty long enough for the little eyes to be kept at close application to the books. The color of the walls, he believed, has much to do with the resulting eye defect. The tint of rooms where light comes from the south should be blue, while an orange or tints of that color should be the rule in north lighted rooms.

Dr. Rebecca Hanna, Red Oak, Ia., said she enjoyed the paper very much. She agreed with Dr. Thomas that the color of the walls was important, as it certainly had something to do with eye troubles. She thought there was too much blackboard space on the walls and too much blackboard work done.

Dr. Robertson, of Council Bluffs, and a member of the school board of that city, believes that steam heating is best, especially when automatic regulators are used. He believed that the indiscriminate use of pencils is bad. As for slates, they are being done away with and paper pads substituted.

Dr. Towne in closing said he had not intended to cover all that pertains to school hygiene in his paper. As regards three-story buildings, he said that in

Digitized by Google

Omaha, land being expensive, they put up five-story school buildings, and his daughter had part of her recitations in the basement and part on the fourth floor. He agreed with Dr. Thomas that too much close application was demanded of the little ones, and especially has this been true of kindergartens in the past, although it is not as bad now as it has been. He thought every physician ought to read the July number of the North Western Monthly, published at Lincoln, Neb., which was devoted to the physical child, and was full of good things.

SURGERY OF THE GALL DUCTS.*

By A. B. MITCHELL, M. D.,
LINCOLN, NEB.

Halstead recently said to one of his classes, "There have been but few operations upon the common duct." This statement from such a source indicates the necessity for reports even from the remoter corners of the earth, that, out of the fullness of accumulated experience, we may learn the true course. Recently Dr. Fenger, of Chicago, presented in the American Journal of Medical Sciences two valuable and exhaustive articles upon the surgery of the common duct, elaborating fully the ball valve action of a floating stone in the duct. He reports six operations of his own, and gives a full history of the operation, from its earliest performance to the date of his first case—covering in all some eighty cases.

Choledocholithotomy is a procedure which should not be undertaken for diagnostic purposes. I regret to say that the modern surgeon is sometimes too prone to make his incision first and his diagnosis afterwards—a procedure sometimes justifiable, but not to be universally adopted; in the case of the gall duct—never! It is imperative, therefore, to look with greatest care to the history of the individual cases, and eliminate any possible source of error. Jaundice is a symptom of many disorders affecting directly or indirectly the hepatic mechanism, and the cases are divided by Osler into two great groups: those in which there is obstruction, either in the larger or smaller ducts, the hepatogenous form, and "cases in which jaundice is due to suppression of the function of the liver cells, as in the widespread necrosis of acute yellow atrophy, or to an excess of cromatogenous material, as in malaria, pernicious anemia, and in certain fevers in which the liver function cannot keep pace with the blood destruction, the hematogenous or non-obstructive jaundice." Murchison's classification of the causes of obstructive jaundice (followed by Osler) is: "First, foreign bodies within the ducts, as gall stones and parasites; second, inflammatory tumefaction of the duodenum or of the lining of the duct; third, stricture or obliteration of the duct; fourth, tumors closing the orifice of the duct or growing in its interior; fifth, pressure on the duct from without; and in a sixth class, those cases due to a lowering of the blood pressure in the liver, including in this class those cases due to mental shock or depressing emotions." Some care is necessary, therefore, before singling out the cases proper for operation. The most common form of the obstructive variety is usually due to a duodenal catarrh involving the opening of the duct into the duodenum; from the swollen mucosa of the gut a plug of mucus fills the diverticulum of Vater, completely obstructing the channel. A catarrhal condition of the duct itself may be present, but such a condition is preceded by a history of hepatic colic due to the passage of gall stones. This form of jaundice is usually afebrile, is unattended by pain, usually in healthy subjects, and with no evidences of grave disease or much enlargement of the liver.

The symptoms of obstructive jaundice from acute yellow atrophy, "icterus gravis"—or malignant jaundice—are not in the earlier stages easy to differentiate from those due to floating stone. Ushered in by a slight gastro-duodenal catarrh, this grave and almost, if not always, fatal malady is usually mistaken for simple jaundice. "After a few days—sometimes two or three weeks—severe symptoms set in—headache, delirium, muscular tremblings, vomiting, hemorrhage into the skin or mucous surfaces, rapidly increasing jaundice with the increase of head symptoms, deepening coma, and death. This form is usually afebrile until near the close."—Osler. The stool is acholic, but one of the most important diagnostic signs is the presence of liusin and tyrosin in the urine. In the obstructive form of jaundice, due to floating stone in the duct, some of the above symptoms are reproduced, but so modified that a little caution will enable the observer to reach a correct conclusion. While the simple and malignant forms are usually afebrile, the case due to floating stone is practically never so. The symptoms are markedly like those of a remittent fever, attended by jaundice. The attacks are ushered in by a chill, rapid tinting of the skin, very marked disturbances of the stomach, vomiting of large quantities of bile, great nervousness and prostration, but very rarely pain of such severity as in hepatic colic, although the pain is located in the upper right abdominal region. Usually the greatest pain is in the stomach. During and preceding the paroxysm, which lasts usually from three to four days, the stools are acholic; in the intervals of the attacks (which occur somewhat irregularly) the bowel movements contain bile in diminished quantity, but immediately following the attack the quantity is increased for a day or two, due, no doubt, to movement of the stone from the point it has been obstructing in the course of the duct, permitting the over-distended ducts to pour their contents into the bowel. The attacks just described recur at irregular intervals, and often cover a series of years, but in most instances a year or two is sufficient to force the victim to desperate chances for relief. The skin, between the paroxysms, rarely clears entirely, and each succeeding attack is followed by increased discoloration. There is rapid progressive emaciation, and recovery is a little less complete after each attack.

I have not mentioned hepatic colic in this connection for the reason that hepatic colic, unattended by jaundice, is due to the passage of a stone from the

* Read before the Nebraska State Medical Society, Lincoln, May 19, 1897.

Digitized by Google

gall bladder through the cystic duct, and does not concern us particularly in connection with common duct obstruction, except in an historical relation. Many cases of duct obstruction are preceded by a history of hepatic colic, a transient jaundice, and apparent complete recovery, but there are many other cases which present the remittent features from the beginning. In these distinctly intermittent cases it is probable that the obstructing stone passes into the duodenum attended by the usual symptoms, or, if the stone be a small one, it may find temporary lodgment in some of the biliary passages, with complete relief of all symptoms, or in cases with an enlargement of the cystic duct, where the obstructing stone may pass into the gall bladder, the same relief would follow. The rather common belief that all obstructing stones pass from the gall bladder into the common duct is erroneous, for we know that stones form in the hepatic branches, and probably also in the hepatic and common ducts. No entirely satisfactory explanation has been offered for one feature of the cases of obstruction, choledochus stone in biliary passages, i. e., the almost universal atrophy of the gall bladder. In my case the explanation was satisfactory, for within the orifice of the cystic duct and protruding into the common duct was wedged a large concretion, the dilated duct permitting a free passage of bile beside it, while a floating stone in the common duct caused by its lodgment and release an intermittent jaundice. Grouping as briefly as possible the symptomatology which will lead us in the right direction, we will place icterus first, for with obstruction of the gall passage it must be present. Its character is intermittent and usually attended by a sharp rise of temperature. "If the intervals are wide apart, months or years, it signifies that the obstructing stone has passed into the duodenum, or found safe lodgment in the gall bladder" (a rare occurrence). Such attacks are distinctly intermittent.

If, however, the attacks assume a remittent type—with even slighter icterus occurring at short intervals—every one, two, or three weeks, attended by colic of a less severe character, vomiting, great nervous prostration, and a sharp rise of temperature, we are safe in assuming that we have to deal with a case of floating choledochus stone. Patients with this group of symptoms emaciate rapidly; and the skin is never entirely clear, so rapidly does one attack succeed another. The same remittent features mark the fecal passages. During the acute paroxysms the stools are practically completely acholic, while with the remission large quantities of bile are discharged per rectum, the ball valve action of the obstructing stone alternately damming it back and releasing it. Next, a physical examination [aided by the authors' stethoscope if necessary] will demonstrate that the gall bladder is not to be found.

Having decided that the case is one for operation, and the decision should be after mature consideration, how shall we proceed? Modern surgery is prone to ignore anatomy, to cut and tie what bleeds, but there are regions of the body which defy incautious approach. That of the gall duct is one of them. I have made the operation but once upon the living subject, but since that time I have made six careful dissections of the parts. In only one of these dissections have I found an arrangement of the parts corresponding to Dr. Fenger's description, which, with reference to the disputed relation of the vena porta, is as follows:

"The vena porta commences behind the pancreas, runs as a trunk 18 mm. in diameter from left to right, slightly upwards, first behind the middle portion of the common duct. About its middle it emerges on the lower right border of the duct and runs from here upwards and to the right for a distance of from 3 to 3½ cm., where it divides into its hepatic branches. On its way it passes from the posterior surface around the lower border up on to the anterior surface of the upper portion of the duct, and covers the lower part of this, extending to or a little upon the cystic duct. The terminal portion of the vena porta is situated on the anterior surface of, and consequently covers, the hepatic duct and its branches. Its termination is about 10 cm. above and to the right of the end of the cystic duct; in dividing it gives off a main branch for the right lobe of the liver at an angle of 110°, which passes downwards and to the right. This main branch is 1½ cm. long and 10 to 12 mm. in diameter. From the place of division a branch for the quadrate lobe 2 cm. long and 7 mm. in diameter passes downwards, backwards, and a little to the left. At the left border, and behind this branch, is the bile duct for this territory of the liver, which is 3 mm. in diameter. Behind the bend and the upper border of the branch to the right lobe, the upper border of the right branch of the hepatic duct comes into view. At the place where the trunk of the vena porta curves round from the lower and anterior surface of the common duct it takes up three other branches, which run along this surface." This from so eminent and so careful an observer as Dr. Fenger should be constantly in the operator's mind; but my few dissections have, with one exception, corresponded with the text-books, which place the portal vein wholly behind the common duct and the hepatic artery, which latter lies close to the duct on its left side.

Recalling our anatomy, we have a heavy organ lying behind the ribs, and supported by numerous ligaments made by foldings of peritoneum. From the inferior surface of this organ passes another double fold, springing from the transverse fissure and passing to the lesser curvature of the stomach. Its right margin is free, and between its layers lie the hepatic artery, the ductus communis choledochus and portal vein—all enclosed in Glisau's capsule of loose areolar tissue. There are usually, also, a few lymphatics. The free border of this fold is the guide which carries us into the foramen of Winslow, which, being entered by the left index and middle finger, enables us to search through the thin covering of the duct for the obstruction—whether it be a choledochus stone or an abnormal growth. An operation upon the bile passages requires an ample incision, which should be in the right lateral region, beginning at the costal margin and extending to or below the navel. A large number of pads will be required to protect the intestines and

Digitized by Google

hold them out of the field, for the operator works in a deep wound before he has finished his task. At least three assistants are required, one to hold the liver, which must be partially withdrawn, one to care for the stomach and transverse colon, one to handle instruments, and a competent nurse, or, better, two. Upon opening the abdomen the extent of adhesions, judging from my own and reported cases, is startling —many of them, especially between the liver and great omentum, and the latter, with the colon, require ligature, as all jaundice cases bleed. Entrusting the liver to an assistant, and the stomach and colon to another, the operator searches for the free margin of the hepatico-duodenal ligament; having found which, he enters it, as already described, with the index and middle fingers of the left hand. The anterior layer of lesser omentum is carefully opened after the stone is located, but the edge of the knife has no place here until the duct is exposed. To recognize tissues here is not easy, and even when the stone is seen shining through the duct wall it will be well to verify the find by means of a fine needle. As slight pressure will empty a vein, great care must be observed that the tissue between you and the duct is not an important vein. The wound should now be packed with gauze about the point selected for incision into the duct, as considerable bile will most likely follow your incision. The cut should be in the long axis and about three-fourths of an inch in length, made over the stone, which is held firmly against the wall of the duct. A small scoop is the best instrument to lift the stone from its position. Having satisfied ourselves that the gall passages are clear, by use of fingers and probe, the incision should be closed by two rows of suture, one approximating row to the mucosa, and a second row of Lembert sutures, fine silk or kangaroo tendon being the best material. A rubber drain down to the wound in the duct and gauze drains about it constitute the dressing. The rubber drain should be removed on the fourth or fifth day and the wound lightly packed. The abdomen is closed in the usual manner.

Other operations for the relief of obstruction of the common duct have been made. Choledochoduodenostomy is the most satisfactory of the methods, but while it gives passage to the bile through the cystic duct, it does not remove the cause. There is much more to be said upon this topic, but I have already taken too much of your time, and I thank you for your kind indulgence.

VOLVULUS, WITH REPORT OF A CASE.

BY J. LUE SUTHERLAND, M. D.,
GRAND ISLAND, NEB.

Charles L., age 36, farmer, unmarried, gave a history of constipation of long standing. An older brother suffered for a number of years from some obscure bowel lesion, which gradually progressed to a fatal termination, was seized with sharp pains in the abdomen on the afternoon of June 4, 1897, almost immediately after taking a drink of cold water. The point of greatest intensity was at the umbilicus, but from there the pain radiated over the entire abdomen. Saturday, the 5th, sometime in the forenoon, he took an enema and evacuated a small quantity of hardened lumps of fecal matter, but without relief of symptoms. After trying several domestic remedies, both for relief of pain and to move the bowels, for three days, he sent for a physician Tuesday morning, June 8. Dr. R. saw him in the forenoon of the same day and prescribed for him for the following three days. I saw him for the first time about 1 A. M. Friday, June 11, at which time his eyes were deeply sunken, he was very restless, tossing from side to side in bed, his pulse 120, but the temperature was slightly subnormal. There was complete absence of intestinal movement of any kind, and he was vomiting large quantities of liquid foul-smelling feces. A careful examination of the entire abdomen failed to reveal any tumor or thickening anywhere. Although not exactly delirious, he was very dull and stupid, answering questions slowly and incoherently. After ascertaining all the facts I could from his friends and attendants, I had him placed upon his right side and gave him an enema of about three quarts of warm soap suds, using a fountain syringe and a soft rubber colon tube, passing the sigmoid flexure without trouble. I had him retain this until chloroform by inhalation produced almost complete anesthesia, then with his hips elevated, the abdomen was carefully but thoroughly massaged until the effects of the chloroform had subsided. He was then placed upon the commode and allowed to evacuate the water, which he did without other result. I then explained to them the uselessness of further attempts with such measures as are usually employed, and that nothing but a surgical operation gave any hopes of relieving the obstruction, whatever it was. To do this it would be necessary to remove him to a hospital, but it being yet quite dark and raining, we decided that while waiting for morning we would make one more effort. Placing him in the knee-chest posture, an enema of ol. petrol. to the amount of about twenty ounces was given in the same manner as was the soap-water. He was then allowed to lie in different positions, to sit up at will, and to stand. He was allowed to retain this until 7 A. M., or nearly four hours. He was then given in the same manner two quarts of soap-water and allowed to go at once to stool. All the water and a part of the oil were evacuated, but nothing more. He was then given a quarter of a grain of morphine and a hundred and fiftieth of atropin, hypodermically, and as soon as the necessary preparations could be made he was placed upon a bed in a spring wagon and brought to the St. Francis Hospital in this city, a distance of seven miles, where he arrived at 11:30 A. M., in apparently as good condition as he was at starting. It was my intention to operate on him that same afternoon, and summoned assistants accordingly, but a colleague whom I had asked to see him, finding him with a normal temperature and suffering comparatively little pain, advised waiting until the next day. To this I very reluctantly consented, at the same time

Digitized by Google

positively asserting that we would gain nothing by the delay. He was then given four ounces of olive oil by the mouth, which dose was repeated after an interval of six hours, all of which he retained only too well. He suffered but little pain and there was but little nausea after reaching the hospital, nor was he given any more sedative or medicine of any kind until just before being placed upon the table for the operation he was given the usual hypodermic of morphine and atropin. He was etherized at 10 A. M., June 12, and the abdomen opened in the median line, with due observance to asepsis from start to finish, and without accident or unnecessary delay. The upper portion of the small intestine was found to be empty and normal in every respect. The lower portion of about ten or twelve feet in length was full of liquid and gas, deeply congested throughout, and in many places highly inflamed, excoriated, and covered here and there with patches of white, flocky lymph. The omentum was also adherent in places to the intestine, but easily detached. Wishing to avoid unnecessary manipulation and exposure of the intestines, I inserted two fingers of my left hand deep down into the right inguinal region and brought to light as complete a specimen of volvulus as it is possible to imagine. The occlusion was three-fold, for not only a loop of intestine had rotated upon its axis, but it held imprisoned within its folds another loop from a little higher up in the gut. The rotation had been from left to right and was easily released (there being no adhesion at this point) by making a complete turn in the opposite direction. The depression encircling the gut was distinctly visible after being released, but the integrity of both gut and mesentery was good, so, after thoroughly warming all of the exposed structures by enveloping them in towels wrung from hot normal salt solution, they were with some difficulty returned to the abdomen and the wound closed with silkworm gut. He died at 8:30 A. M., the following day, about twenty hours after the operation, and without regaining consciousness. It lacked but a few hours of being eight days from the onset of the symptoms until relieved by the operation, and although there is not the slightest room to doubt that the occlusion was complete and continuous, there was no evidence of gangrene or death at the occluded point. Half an hour before death his temperature, which had remained about 99 in the axilla, was 106 F., at which time his bowels moved freely, movement consisting of liquid feces, mixed with the oils that had been given him. The only regret attaching to the case was that the operation was not performed at the earliest possible moment after he came under my care, although I am satisfied he was suffering from ptomain toxemia at the time I first saw him, and it is probable that the result would have been the same. But judging from the condition of the parts involved at such a late day, had the operation been performed upon the fourth or even the fifth day I think one would be justified in believing that it would have resulted in a rapid and complete recovery. I am well aware it would be bad practice and unsafe to advise opening the abdomen in every case of intestinal obstruction, where the diagnosis as to the nature of the obstruction is obscure or in the least doubtful, without a careful and thorough trial of other well-recognized measures, continued two or three days or longer, provided the symptoms did not become urgent, but on the other hand, is it not equally, if not more, reprehensible to persist in repeated intestinal irrigation and the giving of cathartics, including croton oil, metallic mercury, and other intestinal irritants until the patient is in extremis? The literature, at least that to which I have had access, upon the subject of volvulus is meagre, most authors dismissing it with less than a page, ordinary text-book size, and with all of the writings upon the subject one thing is sadly lacking, namely, hard and fast rules for accurate diagnosis. All are pretty well agreed that there is but one principle etiologic or predisposing factor, namely, an elongated mesentery. But this fact is of but little practical value, since we are unable to diagnose an elongated mesentery except in the dead-house; besides, it is a condition in common with intussusception also. But after a careful study and sifting of all the points of differential diagnosis, and a partial diagnosis has been made, the "quæstio vexatio," what is the best course of treatment to pursue? remains unanswered. I have never seen it recommended, but the placing of the patient in the extreme Trendelenberg position, administering chloroform to the surgical degree of anesthesia, and then employ gentle but thorough massage to all regions of the abdomen appeals to me as a rational method. Listen carefully for intestinal gurgling from the time the patient is placed in position, and cease all manipulations as soon as the latter is manifest. While the patient is in this position and still under the influence of chloroform an enema may be given, using a fountain syringe, held a height of not over two feet above the hips of the patient, and exercising care not to overdistend the bowel. Nothing but the utmost gentleness in all manipulations must be used in these cases if we would avoid increasing or intensifying the symptoms and lessening the chances for relief by operation.

TREATMENT OF PUERPERAL ENDOMETRITIS BY THE CAROSSA METHOD.—This consists in irrigating the uterine cavity with alcohol, the cavity being previously packed with gauze in such a manner as to admit of the alcohol reaching every part of the surface. A catheter is first introduced to the fundus, and gauze is then packed lightly around it. A funnel is attached to the protruding end of the catheter, through which a 20 to 25 volume per cent. of alcohol is poured so as to flow into the gauze. The quantity used is from 30 to 50 c. cm. every hour, day and night, for two to six days, when the gauze is removed.

DOCTOR, we want your name in our list of subscribers. Twenty-five cents in postage stamps will get it for three months, if you want to try it for that time. Better send the dollar while you are about it, though.

Digitized by Google

TYPHOID FEVER AND CHOLANGITIS.

By AUGUSTUS DETWILER, M. D.,
OMAHA, NEB.

The recent discussion on the subject of cholelithiasis at the late meeting of the British Medical Association, and the diversity of opinion expressed as to its occurrence in typhoid fever, induces me to report the following cases:

Mr. F., aged 32, and never ill before, had just passed through a typical attack of typhoid fever, with an evening temperature, when at its height, of 104° to 105° and pulse varying from 90 to 110. On about the twenty-third day, when the temperature was 99° in the morning and the pulse 90, he was suddenly seized with a severe chill, lasting about twenty minutes, followed by sweating and a great pain in the region of the gall bladder. The temperature rose to 103.5° and the pulse to 140. The pain lasted about four hours and required morphine for its relief. When the pain ceased the patient was almost collapsed and the occurrence of slight tympanitis made me think of a possible perforation; but the appearance of yellowness of the conjunctiva on the second day and the passage of a small gall stone on the third cleared up the diagnosis. A relapse followed, but the patient made a good recovery, and in nearly three years there has been no return of the biliary colic or jaundice.

The second case is that of a young man, previously healthy, in the third week of typhoid fever, with an evening temperature of 101.5° and a morning temperature of 100°. During the whole illness he complained of more or less pain in the right hypochondrium and slight tenderness on pressure, but the liver was not enlarged nor its border palpable. After the usual morning visit on what was supposed to be the seventeenth day, and the temperature had been noted as 99.5° and the pulse 92, he was seized with a severe chill lasting about fifteen minutes, followed by sweating and pain in the right hypochondrium so severe that he tossed about the bed from side to side and required morphine for partial relief. The temperature rose to 104° and the pulse to 120, but in about three hours the pain ceased and the evening temperature was 100° and the pulse 94. The next day there was a similar attack, but less severe. The urine in this case showed bile pigments, but no stone was detected in the feces. On the second day there was very slight jaundice. This case is now well on in convalescence and there has been no return of any symptoms pointing to the liver.

The third case is that of a young lady, aged 19, who had never been ill until the present attack of typhoid fever. For the first two weeks the liver dullness was not increased, nor was any tenderness present, but from about the sixteenth day the dullness was noted to extend from the fifth space in the nipple line to nearly two fingers' breadth below the costal margin and the whole area was tender on pressure. There was no jaundice nor colic and the salycilates seemed to relieve this patient more than morphine. At the present time the liver is still tender on pressure, but not enlarged.

These cases seem to show the possibility of the occurrence of cholangitis started directly by Eberth's bacillus, or extending by continuity from inflammatory areas in the intestine, and followed by the passage of masses of inspissated mucus, or small stones, causing biliary colic. Or, it is possible that the liver in the exercise of its so-called "protective function," by attempting to destroy or eliminate the toxic products of the typhoid bacilli, becomes the seat of a low grade of cholangitis with its accompanying phenomena. And it may be that in these hepatic changes, —the result of typhoid fever—there is an explanation of the cause of certain obscure cases of cirrhosis, with pathological conditions not very different from the recently described "dyspeptic cirrhosis" of French authors. At any rate, whatever may be the true theory, it is interesting to note the occurrence of chills of hepatic origin in these cases of typhoid fever, and to see in them the probable explanation of the once so frequent (?), but, since the discovery of Laveran's organism, now so rare disease,—typho-malarial fever.

DEATH FROM CHLOROFORM—REPORT OF A CASE.

By LEWIS SCHOOLER, M. D., LL. D.,
DES MOINES, IA.,
PROFESSOR SURGERY, IOWA COLLEGE OF PHYSICIANS AND SURGEONS.

C. C., American, aged 28, was struck on left side of head with an iron poker, one-half inch in diameter, the point of contact being two inches above and a little in front of the left ear. The wound resembled a gun-shot wound in appearance, being circular and about the size of a forty-four caliber bullet. The affray occurred at noon on the — of October. He was seen two hours later by Dr. F. L. Wells, of this city, who dressed the wound temporarily, and ordered him to the hospital. He left the doctor's office on foot, apparently not suffering at all, and, according to his own statement, after drinking some beer, entered the hospital at 5 P. M. of the same day. Dr. J. W. Adams, the attending physician, did not deem it wise to disturb the wound that evening, and asked me to see him the following morning at 9 o'clock. When I arrived he was in bed, and stated that he had had only a fair night; did not complain of pain; no paralysis; said he had not vomited; pupils unequally dilated; pulse and temperature normal; wound showed very marked depression, with small wound through scalp, which had been slightly enlarged by Dr. Wells. The nurse was directed to prepare him for operation at 1:30 P. M., same day. The intended operation was exploratory and trephining, if found necessary. He was placed upon the table and the administration of chloroform begun in a careful manner by a competent assistant in the presence of the class. An Esmarch inhaler was used, and the chloroform was dropped upon the cloth. The administration had continued about three minutes, when there was a slight movement of arms and body, and respiration had ceased. Inversion, artificial respiration, application of electricity, inhalation of amyl nitrite, etc. were resorted to, but without avail.

Digitized by Google

A post-mortem revealed a depressed fracture of both tables of the skull, the inner depressed portion being about three-fourths inch in diameter and nearly square, while the outer table was about one-half the size of the inner and almost circular. All the vital organs were practically normal, and nothing was found to account for his death.

The patient was a confirmed alcoholic, but otherwise healthy. He had been in the hospital a few months ago, suffering from a gun-shot wound of the arm, and the same assistant had administered to him chloroform on two different occasions without any bad results. But notwithstanding this, his death is clearly attributable to the chloroform.

I have always believed, and have so taught, that the fact of a patient having taken chloroform one or more times should not be considered as positive evidence of its harmlessness under different circumstances, and this case seems to strengthen that view.

SOME INTERESTING CASES.*

BY E. VIKO, M. D.,
PARK CITY, UTAH.

Now and then in our practice we meet with cases that are more or less extraordinary; some test our skill and experience and often try our patience; others will show us in a striking manner the vis medicatrix naturæ. At the same time they are very instructive.

I report the following cases in the hope that they may be of some interest to you:

CASE I.—Three and one-half years ago I was called to see Mrs. B., aged 45. She complained of severe, sharp, and cutting pains in the rectum. On examination sharp shells of bones were felt. With the aid of a rectal speculum and forceps I removed four shells of bone, apparently fetal cranial bones, which I now show you. As far as the finger could reach there was no break in the continuity of the rectum; the womb was quite large, and behind it, in the cul de sac, was an irregular mass. She gave the following history: Eight years previously she had an attack, which, from the symptoms she described, resembled rupture of a tube in ectopic pregnancy. After some weeks of sickness she gradually recovered. Thre years later, she said, she had tearing pains in the left groin, with a swelling at that place. After several weeks' treatment the swelling subsided. She had been in fairly good health until three and one-half years ago, when I removed the above mentioned bones. She has been in good health ever since.

CASE II was a girl two and one-half years old, who had swallowed a brass screw an inch long. Her father told me that for a few seconds she was blue in the face and choking. When I arrived a few minutes later she was playing on the floor, apparently as well as ever. It was concluded that the screw had entered the stomach, and a diet consisting of mashed potatoes, bread, and a scant supply of liquid nourishment was ordered for three or four days; that cathartics should not be given until the third or fourth day. The parents were also instructed to watch for the appearance of the screw in the stools. On the third day the screw was passed per rectum. It was covered with a smooth calcareous deposit.

CASE III.—Mrs. G., aged 35, pregnant; full term; primapara; twins. I was called to attend her at 3 P. M. She said the "waters" broke at 4 A. M., but she had had no pains until 10 A. M. The pains were medium strong and frequent; os dilated to the size of a dollar. I found that I had to deal with a face presentation, with right mento-posterior position. I first endeavored to convert it into a vertex presentation. As the membranes were ruptured, Schatz's method was impracticable, and Bandelogue's method was tried without success. Failing in producing a vertex presentation, I pulled the chin down as far as possible in the hope that the chin would rotate to the pubic arch in accordance with the obstetrical law that the most dependent part usually rotates to the front. I worked and waited patiently until 9 o'clock, but there was no change in the position and no progress. Recognizing that the head was quite small and compressible and the pelvis roomy, I decided to put on the forceps, in order to force the head through, as a few cases reported by Braun, Smellie, and Taylor were delivered in that way. With the aid of the forceps and under chloroform anesthesia my effort was crowned with success; the chin extended the perineum and the vertex gradually slid from under the pubic arch. The baby was born alive. The perineum was torn. In half an hour pains set in and the head of the second infant presented at the inferior strait, vertex presentation. This infant was apparently dead, as there were no heart sounds and the cranial sutures were not united. After two hours of waiting, I considered procrastination dangerous to the mother, and delivered the second infant with the aid of the short forceps. The second infant had been dead for some time, as the skin could be peeled off in patches. Immediately after the delivery of the placentæ the perineum was sutured. The first infant, which is alive, weighed four pounds, the second about three pounds. The mother made a good recovery.

CASE IV.—Mrs. K., aged 65. She consulted me relative to otitis media, with a large perforation in the ear drum. An attack of scarlatina in childhood brought on the trouble. The ear had been discharging now and then since, and treatment had been of little benefit. She was informed that the middle ear disease could possibly be benefited by treatment, but that the perforation in the tympanum was too large to be healed up. By the aid of instillations of a solution of silver nitrate and the Politzer bag, etc., the middle ear trouble rapidly improved, but the perforation was as large as ever. As an experiment I decided to try Okuneff's method for closing old ear drum perforations. Some pure trichloracetic acid was obtained. Okuneff recommends the application of a 10 per cent. solution of cocaine before the acid is applied. This seems to be unnecessary, as the pain from the acid is not severe. The pure trichloracetic acid was applied to the edges of the perforation by means of a slender probe wound with cotton. After three treatments,

*Read before the Utah State Medical Society, held at Salt Lake City, October 9, 1897.

Digitized by Google

done once a week, the perforation was closed. I report this case to illustrate the surprising and stimulating action of the trichloracetic acid.

NERVOUS EXHAUSTION.

BY J. M. AIKIN, M. D.,
OMAHA, NEB.

Nervousness is an affection of the system so frequently seen by every practitioner of medicine that its cause is sometimes carelessly considered and may give cause for errors in diagnosis and prognosis. It is a convenient term in common use to indicate certain states of the nervous system of which the anatomical basis is unknown, yet which on one side is characterized by a want of vigor, efficiency, or powers of endurance, and usually interfering with a number of the nervous functions, while on the other hand appears the evidence of active derangement, which in part occur as positive symptoms and in part are the result of the failure in mutual support and control, which the component parts owe each other to the healthful functions of the nervous system. Nervousness precedes a complete failure of bodily and mental strength and is a legitimate reward of the modern mode of living, under the high pressure necessary in those who would have the reputation of working the quickest and attaining the highest plane in station or finance in the shortest possible period. A partial breakdown implies only a few months' semi-illness, with return to a somewhat less than the former working powers, and then reinstates the sufferer as an honorary member of society, useful for easy positions; while nervous prostration is the capitulation of the entire nervous economy, culminating in a more or less complete failure of the mental powers.

This disease, if we may so style it, is a pure American product, and has been elevated to the nosology and nomenclature of our medical literature by Dr. Beard, who coined the more euphonious "neurasthenia," which is quite comforting and presumes nothing. In an aggregation of subjective symptoms, many of which are aptly fitted in other clinical histories, it appears intelligible why a diagnosis of neurasthenia is often made, and its possible incorrectness may, for obvious reasons, be difficult to demonstrate. Nervousness is sometimes an indication of power; but as understood and used now, implies deficient strength; and in persistent cases, a growing degree of impairment of nutrition in the nerve centers, brain or cord, or both. Sensory and purely subjective symptoms dominate all others, but persistent loss of sensation does not exist in a functional neurosis. Fugitive pains, tingling sensations, indefinitely marked spinal pains, tinnitus aurium, pressure feeling in the head, and interference with vision are in many cases nature's mode of calling attention to an overworked nervous system, but which is not organically changed from its congenital formation.

In functional nervousness the motor power remains intact, but deficiency in strength exists, yet the inertia complained of so often by patients in the early part of the day is not so much a real lack of muscular strength as a want of desire to make the effort; as I recently observed in a female, whose alleged loss of motility was suddenly aroused to a vigorous resistance by the exhibition and use of a hypodermic syringe. Enuresis and many cases of nocturnal nervousness in childhood and youth are not always an evidence of some grave cerebral or spinal disorder, as some charlatans would educate the people to believe, and may in many cases be quickly and permanently relieved by a speedy and continuous cessation from over or improper ingestion of food. Moreover, the most delicate and complex part of any system is prone to suffer when one or more of its members are impaired, and the mental functions are lessened in power, memory and will power are weakened, and mental depression, with physical lassitude conjoined, equals nervous irritability. We doubt not a great many sensory symptoms originate in the brain, and the interaction of all its parts is so closely related that a disturbance of one region affects the whole. That the brain can and does become so exhausted as to lose both its trophic and energizing powers is quite as rational a conclusion as to say muscular fatigue follows prolonged physical exercise, and if refraining from the latter restores it to normal vigor, the natural cure for the former would be rest, the completion of which is found only in plenty of natural sleep and an abundance of healthful food. Subjective symptoms are legion, and often misleading; this I believe is especially true when the patient is exhaustive in enumerating his or her ailments. Accepting this as true, we must give more attention to the objective symptoms, and by thorough physical examinations establish the truth or falsity of the subjective description, and if we find the functions of one or more organs or groups of muscles out of harmony with physiological action, we must further prove their diagnostic value and prognostic importance by their constancy and the degree of impairment in a given period. Moreover, the unequal, or constant and equal dilatation of the pupil for months will sometimes disappear permanently if decided and lasting improvement of the general condition is established.

Nervousness,—or by whatever name it is known—is a condition of all ages and a factor of every tense in the human life; but the present is the more formidable, at least to us, and is demanding of the medical profession a thorough acquaintance with all the points that, after repeated and careful examinations, the opinions expressed may not further enhance the vagaries of the people to the detriment of rational medicine.

For the treatment of a large per cent. of these cases no "hard and fast" rule will apply, as each case must be a law unto itself. There is not a medical gentleman in this room, be his practice ever so rigidly restricted to his chosen department of the whole field, who does not see patients whose complaint is "nervousness," and if the local "fad" in her social circle is to wear glasses, the oculist is consulted; or if she be

* Read before the Omaha Medical Society, May 25, 1897.

Digitized by Google

a wife, the cares and incompatibilities of maternity with social life may become the "undiscovered" cause of an ovaritis, and a gynecologist or surgeon is needed. In either case the qualified specialist will discover if the organs complained of are pathological or if the distress be merely the local expression of a general malnutrition in an organ whose physiological function has been overtaxed. The right assignment of cause and effect will open the avenue for intelligent dietetic and hygienic recommendations which may materially aid the medication. The nervousness from absence of physical exercise, in connection with the crowded mental effort urged upon children and youth in our city schools, cannot be cured by drugs, and the instability of the nervous system in adults arising therefrom cannot in every case be reconstructed.

To summarize: The functions of the nervous system comprehends not alone mind, motion, and sensation, but the functions of every organ, the vascular system, and all nutritive processes are under its control. The field is as large as general medicine, and the surgeon should be an equal authority with the neurologist in determining the sequence of trauma on the ous system, while the latter is unworthy the name, if he constantly fails in properly estimating the nervous symptoms. "A stable, well-organized symptom complex indicates organic nerve lesion, while instability of symptoms and disorder in arrangement denote trivial injury. I have seldom heard expressed a more rational appreciation and lucid description of the value of nervous symptoms in certain neuroses than was set forth in an essay by Dr. A. F. Jonas before the Nebraska State Medical Society one year since and reiterated by him only last week while discussing a paper read in our recent meeting. It was also well said by Dr. D. C. Bryant in his sentiment to the specialist at the banquet at our recent meeting of the State Medical Society, that the advance in general medicine has made the specialist a necessity, but he who would conduct well his chosen department of human pathology must first know well the physiology and pathology of contributory parts to the human economy, and that symptoms now recognized and rightly referred to the nervous system were formerly either not present, or unrecognized, and an evil spirit, insomnia, or pedal hyperhidrosis assigned as the cause.

PUERPERAL SEPSIS.*

By A. B. ANDERSON, M. D.,
PAWNEE CITY, NEB.

In presenting this short paper upon the subject of puerperal sepsis before this society, it is not my purpose to enter into any discussion of the causes or the prevention of puerperal fever, but rather to report two cases, both rapidly fatal, and from the considerations of which some practical deductions may be drawn of a totally different nature. Looking at these cases from the one standpoint, we are impressed with the different pathological conditions obtaining in the different forms of puerperal infection. We no longer concede that puerperal fever is a specific disease due always to the same germ infection, but rather to an infection of pathogenic microbes of different varieties, and influenced by the peculiar condition that exists in the puerperal woman. The protean forms of puerperal infection are well illustrated by the cases reported.

In the Journal of the American Medical Association for August, 1895, I reported a case of puerperal sepsis simulating in its symptomatology disease of the brain. In this case the temperature was very moderate, pulse rapid, respiration sighing, sphincters relaxed, allowing involuntary discharges from the bowels and bladder. She had a slight convulsive seizure; aphasia and general hebetude followed, lasting for several days. Neither peritonitis nor even tenderness over the abdomen existed, and all the symptoms rapidly cleared up under uterine irrigation and curettage.

The first case reported to-day gives us a clear-cut case of putrid infection due to retained portions of placenta,—a case in which the bacilli of putrefaction and their ptomains have full control. The hypertoxic infection is not only abundant and rapid, but unresisted, and a fatal toxemia is the quick result.

February 18, was called by Mr. B. to see his wife, who had been confined just one week prior to this date. He reported that she had a very speedy delivery and had no attendance except the neighboring women; the after-birth came in a short time, and the woman seemed to be doing well, only she could not sleep and was extremely nervous. Had milk for the child until the day preceding my call, when it was not sufficient. No fever, no chills; bowels and kidneys acting well. Discharge he reported somewhat offensive, and he had learned just before starting for me that there was some swelling about the vulva. This latter statement caused me some uneasiness; yet I was unprepared for what I found on entering the sick room. I was met at the door by that intensely putrid odor which as a first salutation in a lying-in room is inclined to make a man turn back for reinforcements. At any rate he is very apt to wish he had been absent when the call came and his competitor had gotten the case. On further investigation I found a very rapid and weak pulse, scarcely perceptible at the wrist; a cold and clammy skin, eyes sunken, with dark rings around them, abdomen greatly distended, the uterus easily outlined and as large as pregnancy of six months, a swollen and sloughing vulva, a string of membranes protruding from the outlet and the odor indescribable, the patient conscious but uncomplaining except a few low moanings. There was complete anorexia and occasional vomiting, temperature below normal.

The friends were quite uneasy by this time, but seemed utterly shocked when told that I could see no possible show for her to recover, and that in my opinion she would not live twelve hours. I removed the string of membranes, cleansing vagina and vulva with hot antiseptic solutions, gave stimulants by mouth and hypodermically, but all to no purpose. The patient lived just eight hours from the time that she

*Read before the Nebraska State Medical Society, Lincoln, May 18, 1897.

Digitized by Google

seemed to be ill enough to call a physician. In this case we have a typical example of that form of puerperal infection due to decomposition and absorption of the products of putrefaction,—the condition of sapremia.

It is certainly worthy of note also that in this unfortunate case the fatal result was entirely preventable. It is not often, however, that we encounter such profound sepsis with so little external manifestation of the disease until near the end. "The virulent character of the toxic force results in a paralysis of the nerve forces." Neither the warning chill nor the alarming pain of peritonitis prepares them for the oncoming storm.

The second case was one of septic pleuro-pneumonia, in a woman who was delivered of her sixth baby on the 6th day of March, attended by the accommodating neighbor women. All went well enough to satisfy all concerned until the twelfth day, when she was taken with a severe pain in the right side under the arm. I saw the case the next day, found a temperature of 100°, pulse 120, suppressed and painful cough, bloody sputa, respirations 40, and groaning at every breath. I found a large distended tympanitic abdomen, crepitation over greater portion of right lung, with extensive dullness on percussion. The history obtained from the patient, who was perfectly conscious, was that she had been sweating rather freely, with some chilliness, but no apparent fever. The lochia had been entirely suppressed for several days, and the bowels had not moved since her confinement. It was plainly evident, that, although there had been no symptoms to alarm either her husband or herself, yet septic infection had been slowly progressing for some days, and now we had a secondary septic pleuro-pneumonia to deal with. An unfavorable prognosis was given, which was verified by a fatal termination thirty hours after she was thought to be seriously ill. In this case the surroundings were bad. The bed clothing and the patient's underclothing were soiled and offensive. A towel fised for a binder was soiled, and had not been changed since it was first put on.

It is not the intention of the writer to enter into a discussion of the management of labor cases. It is to be supposed that every up-to-date physician manages his confinement cases on the principle of strict surgical cleanliness—or as near that point as circumstances will allow. Those of us who practice in the country must frequently be called upon to attend cases with whom we have no previous acquaintance. The second stage of labor may be already terminated. In these cases we must be content to clean up, disinfect the surroundings, and advise the patient to keep herself as clean as we have left her, as we may not see the patient again. However, the question suggested by the cases reported is, What is our duty, and what can be done for those cases that never come under the care of a physician until some accident, as they term it, is encountered? We cannot say that we have no responsibility in these cases. There is a responsibility somewhere. There is a fearful responsibility upon those ignorant, but kindly disposed, women who are ready upon call to officiate in the lying-in chamber. The law against midwives does not reach them, for they do not profess to be midwives, or to practice midwifery, but go as a neighbor, and if a doctor is not sent for they officiate. I know it is often true that these same kindly disposed women offer their services, and make examinations with unwashed hands, and guess whether or not all is right. At almost every meeting of our society some report upon this subject brings about a discussion. However, as I see it, we are no nearer the remedy than we were years ago. I know of no remedy except the remedy of education. Legislation will never do it. It is a hopeful sign, I think, when we note the fact that the younger generation of women are more alive to the necessity of skillful attention at this critical period than were their mothers. The tendency is, however, after several successful confinements, to save the physician's fee and take the risks. Now, the second deduction that I would draw from such cases, which I trust are not very common—and yet it has been my unfortunate experience to encounter two in as many months—is in relation to the responsibility that we, as conservators of human life, must accept towards these cases that we never see until the enemy has full possession and refuses to be dislodged.

As I have intimated, it is in the matter of education that success must be reached, if reached at all. The best manner of bringing about the desired result is a difficult question. The fact is that the true cause is not generally located by the community. Instead of seeing as the starting point the lack of disinfection and asepsis, they say the woman has taken cold and inflammation followed. Or they hold the physician responsible for the non-recovery, although not called until the patient is in extremis, never for once seeing that a dirty bed, a dirty quilt, or an unclean hand is responsible for the dire results.

RELATIONS OF THE RECTUM AND GENITALS IN GYNECOLOGY.

BY BYRON ROBINSON, M. D., B. S.,

CHICAGO, ILL.,

PROFESSOR IN THE CHICAGO POST-GRADUATE SCHOOL OF GYNECOLOGY AND ABDOMINAL SURGERY; PROFESSOR OF GYNECOLOGY IN THE HARVEY MEDICAL COLLEGE AND THE ILLINOIS MEDICAL COLLEGE; GYNECOLOGIST TO THE WOMAN'S HOSPITAL; GYNECOLOGIST TO THE WOMAN'S CHARITY HOSPITAL, AND CONSULTANT TO THE MARY THOMPSON HOSPITAL FOR WOMEN AND CHILDREN.

Many have observed the close relations of the rectum and female genitals in certain diseases. It is most manifest when the nervous apparatus of either rectum or genitals is involved. The consideration must be discussed on both anatomic and pathologic grounds. A brief view of the great elemental structures will throw light on the subject,—as the muscles, the nerves, the vessels, and proximity of pelvic organs. It seems to me, if we are going to have any established relations between the dieases of the rectum and genital organs, it must be generally considered along the lines of anatomy. Of course, infection is the only thing that makes these organs sick in general, and

Digitized by Google

the prime factor is gonorrhea. The established relations of disease between rectum and genitals will be chiefly manifest by the nervous system.

About seven years ago I began to investigate a matter in connection with these diseases, and that was, women had more rectal strictures than men, and in the Toledo Medical College I had the opportunity of ample dissecting material, and I made up my mind at that time that gonorrhea was the cause of the rectal strictures. I wrote an article on the subject some five years ago and never heard any more of it, showing that physicians did not believe that this was the cause, but I am now absolutely convinced that gonorrhea is the cause of these strictures in women. The gonorrheal germ contained in the vaginal discharges goes backward over the perineum and enters the rectum. It works its way into the rectal mucous membranes and cylindrical epithelium, producing cicatricial tissue as it does in the urethra. We have a gonorrhea of the throat, as well as of other portions of the body, e. g., the conjunctiva.

The blood vessels of the pelvis are important when considered in connection with the nervous system, as branches of the same trunk supply genitals and rectum. All of these vessels carry a large number of nerves, and irritation of any of these nerves will disturb the lumen of the blood vessels, resulting in irregular circulation and congestion. Now, the blood vessels of the genitals and of the rectum belong to similar branches, and have no relation except as carrying nerves, on account of reflexes resulting from peripheral irritation. We know that the nerves of the pelvis, so far as the internal genital organs are concerned, are mainly the sympathetic nerves, and the external, or those near the skin, are the cerebro-spinal nerves. I am reminded here of a notable article written by a distinguished man in New York, Dr. Dana, on "The Passing of the Reflexes." I have the greatest respect for Dr. Dana. He has written one of our best text-books, but so far as "The Passing Reflexes" are concerned, they will never pass while mankind is afflicted with peripheral visceral irritation. Dr. Dana, so far as the deeper intent of his article is concerned, is in part correct, but he is too often on the wrong side of the fence. Like many other neurologists, he says no deep-seated disease is caused by peripheral or reflex irritation, and that no deep-seated disease is cured by removing the peripheral or reflex irritation. For the sake of argument, we will admit the testimony. But deep-seated diseases are comparatively few and often painless; besides, practical and reliable gynecologists do not attempt to remove deep-seated disease by amputating portions of peripheral irritations or reflexes. But functional irritations from "reflexes" are numerous and very distressing. Besides, as a matter of fact, the removal of peripheral irritation or reflex due to disease will often restore health. If Dr. Dana had studied practical gynecology he would not write in his present style. Many neurologists will not allow anything in neurology except the cerebro-spinal axis. A neuron will work outside the cerebro-spinal as well as within it. The neuron receives sensation and emits emotion in the abdominal brain as well as it does in the cerebro-spinal axis. The object of a neuron, or nerve cell, is to resent irritation wherever and whenever it arises, and this constitutes "reflexes," the disturbance of any one organ inducing disturbances in a distinct organ.

Diseased genitals, as every practical gynecologist knows, produce by reflex irritation pain in the back, head, and stomach. Irritation in the rectum long continued will produce similar disturbances. The nerve supply of the genitals and rectum is of two kinds: one the sympathetic, which will give dull pains; they may be sub-conscious; and the other the cerebro-spinal, which give the acute pains. It is true that the sympathetic nerves supplying the genitals, the hypogastric and ovarian plexuses, arise from higher ganglia than the sympathetic nerves supplying the rectum, which chiefly come from the inferior mesenteric ganglia. But both the abdominal brain and the inferior mesenteric ganglion are alike subject to reflexes from peripheral irritation. Rectal irritation produces reflexes disturbing the genitals as well as genital irritation produces reflexes disturbing the rectum. The genitals and rectum are a balance beam of nervous mechanism and the disturbance of one disturbs the other. The external genitals and external rectal apparatus are supplied by the same cerebro-spinal nerve, the pudic, arising from the second and third and fourth sacral. If we represent the forearm as the trunk of the pudic nerve, the little finger will represent the hemorrhoidal, the ring finger the perineal, the middle and index fingers the vulval, and the thumb the nerve supplying the clitoris. Thus it is observed that cerebro-spinal nerves, the pudic, hold in distinct and delicate balance the external genitals and rectum. Disturbance in one will affect the other. Now, whether peripheral irritations originate in the genitals or rectum, the continual action of reflexes will unbalance the whole visceral system and the patient will gradually pass through indigestion, non-assimilation, anemia, and end in neurosis.

In the relation of genital and rectal diseases the subject of muscular trauma must be considered. Muscular trauma must be admitted as a factor in disease. The muscles which exacerbate the existence of disease between the rectum and genitals are the psoas and levator ani muscles. The movements of the levator ani induce motion in both rectum and genitals. Germs are further disseminated and pain is exacerbated by the muscular trauma. The close relation of the genitals may be observed by the clinical fact that operation on the rectum causes retention of urine. When pelvic cellulitis exists, which is generally subsequent to peritonitis, the vessels and nerves which pass through the pelvic floor are surrounded by perilymphatic spaces, and the distribution of infection is thus enhanced by muscular action. The lymphatics can also carry the infection from rectum to genitals, or vice versa, on the veins, arteries, or nerves. Rectal diseases may be gradually extended by the lymphatics into the great field of sub-peritoneal tissue, involving the genitals. How frequently does genital suppuration perforate the rectum, inducing distressing and persistent rectal disease.

Digitized by Google

Again, the psoas muscle, by its traumatic action on the sigmoid during times when it contains virulent microbes, induces migration of germs or their products, inciting adjacent peritonitis. I found about 80 cent. of peritonitis in the meso-sigmoid in some 300 personal autopsies on the adult. Also, this same muscular action of the psoas induces infective micro-organisms to pass out of the fimbriated end of the Fallopian tube and incites a local peritonitis. Hence muscular action (trauma), the levator ani and psoæ, exacerbates the diseased relations between the rectum and genitals.

I cannot agree with one point brought out by Dr. Bacon, namely, that apparently everything in constipation is due to the sigmoid flexure. I think his position is untenable. I consider constipation a neurosis of the colon. The action of the colon and small intestines is different. The colon, acting as a reservoir, has a rhythmic action every twenty-four hours; it is under the influence of the inferior mesenteric ganglia. Food will pass through the small intestine every four to six hours. The small intestines are under the rule of the abdominal brain. After studying this matter carefully, I am convinced that the trouble cannot be attributed solely to th sigmoid. I have done five hundred post-mortems, and I have recorded about three hundred and fifty that were made on adults, and in fully 80 per cent. of the latter number the disease was found in the meso-sigmoid and was caused by trauma of the psoas muscle on the left side and not by accumulation of feces in the sigmoid. We found 72 per cent. of adhesions, such as plastic peritonitis over the left psoas. The sigmoid flexure does not become diseased by impacted feces merely, but by the traumatic action of the psoas muscle, inducing germs or their products to invade adjacent tissues.

The doctor did not touch upon one point which I consider of importance, and that is the anatomical structures in women as having a bearing upon this subject. I have made fully 10,000 examinations of women, and in 70 per cent. of them disease was found on the left side. In considering this subject we must have anatomical considerations to work on, and not merely the rectum as having an established relation. Dilitation and contraction of the rectum in a woman who has pyosalpinx leaves the tube much worse, and especially on the left side. This is a clinical fact that anyone can demonstrate.

A point that I worked out several years ago was, that the left tube has a lumen much larger than the right, consequently it is much easier for infection to get out of it by dilitation and contraction of the rectum. While the sigmoid flexure in many may be found in the pelvis, I cannot agree with the doctor that it creates constipation from this position, for nearly all sigmoids lie in the pelvis. A loaded sigmoid rests on the returning ovarian vein and brings about congestion by pressure upon the pampiniform plexus of the left side, and this induces genital disease by retarding blood flow. The irritation of either genitals or rectum will impair the other. Any person who has practiced gynecology will see the practicability of this point. The left ovarian vein is not only pressed on by the sigmoid, retarding its flow, but it opens at right angles in the left renal, both enhancing congestion. Also the right common iliac artery rests on the left common iliac vein, aiding to retard the left venous flow, which will congest both genitals and rectum. Therefore, from anatomical consideration, through vascular, muscular, and nerve mechanism, we would consider that the relation of the rectum and genitals are very close and intimate, that they should be carefully studied together. The mere fact that rectologists appropriate the gynecological field does not prove any intimate connection, as that may be a commercial move.

RUPTURED TUBAL PREGNANCY, WITH REPORT OF TWO CASES.*

By F. A. LONG, M. D.,

MADISON, NEB.

An accident of such rare occurrence that it falls to the lot of but few general practitioners to encounter a case in the practice of a lifetime, tubal pregnancy, and its inevitable concomitants, rupture and hemorrhage, is a subject of such overwhelming importance to every practitioner as to demand his most serious attention.

Hastily summoned to the bedside of a patient to whom this accident has just happened, and whose life blood is fast ebbing away within the concealment of her own body, a glance suffices to tell him that it is a grave condition that confronts him, and if he be not a man of quick decision and prompt action he may be obliged to appease the anxious inquiries of mourning relatives and friends by replying that the patient died of "paralysis of the pneumogastric nerve," or, perchance, of heart failure! No doubt many cases have died and do still die without being diagnosed.

It having fallen to my lot to see two cases of ruptured tubal pregnancy in my practice, one about one and one-half years ago, and one within three months, and having no knowledge of its occurrence within the radius from which the membership of this society is principally derived, I feel warranted in giving the reports of these cases in detail:

CASE I.—I was hastily summoned out of bed early one morning in May of last year to the bedside of one of my best patients, a lady of 32, four blocks away. Patient had agonizing pain in pelvis and a feeling of faintness; limbs were drawn up; features pale and pinched, indicating great suffering. Without waiting to investigate any further, except to note that the pulse was rapid and weak I gave a hypodermic of morphia, as the mental appeal from the patient for relief from the pain was too great to resist. The husband told me he had gotten up about 6 o'clock, leaving his wife apparently fast asleep, went to the barn, and soon returning heard a faint call from the bathroom adjoining the bedroom, and on going there, found his wife on the closet bowl, moaning and in a condition bordering on collapse, pale, limp, almost speechless, and, to borrow his words (a cool-headed, intelligent man), almost a picture of death. She was able to indi-

*Read before Elkhorn Valley Medical Society, Norfolk, Neb., October 5, 1897.

Digitized by Google

cate to him that she had great agony in pelvis. He carried her to bed, but immediately afterward, at her request, she was again carried to bowl, when bowels moved freely. I found out that she had passed two weeks over the menstrual period. Having previously attended her four times while miscarrying (in two cases twins), I at once thought a miscarriage was again impending. An examination revealed a normal os and uterus, great tenderness in left fossa, and a mere suggestion of a bloody tinge on the examining finger. The tenderness over the left side was extreme and the pains did not have the periodical character of labor pains. For a few moments I was puzzled. I went to my office after something, and returning a few minutes later, found the patient apparently comatose. The husband suggested that the opiate had taken an unusual effect. Clammy perspiration covered her body. Pulse was imperceptible at the wrist. Like a flash the true diagnosis now occurred to me. Quickly grasping my hypodermic syringe, I injected one-twentieth grain strychnia, raised the foot of the bed twelve inches, and applied external warmth. Digital examination now revealed a boggy mass in right pelvis, and though patient was unconscious, pain was elicited by bimanual examination. The pupils were dilated; cold, clammy perspiration stood out in great beads; the respiration was slow, not over 12 a minute; the pulse was barely perceptible at times, at others not at all; temperature 96. This was the condition half an hour after I was called. The hot applications were continued, hypodermics of strychnia repeated and alternated with trinitrin, digitalis, and brandy at short intervals. The heat was turned on the room and kept near a hundred degrees.

The very alarming condition was explained to the friends, and the only possible show of getting relief from a ruptured tubal pregnancy by operation was pointed out, provided there was sufficient reaction to stand an operation. Dr. Bear was sent for and arrived at 11:30. The diagnosis of ruptured tubal pregnancy was concurred in. The condition of the patient remained practically unchanged all forenoon. About noon the temperature was 94, the respiration 9, and the pulse wholly imperceptible at the wrist. The heroic doses of strychnia and digitalis were now given still more heroically, and every effort to sustain life redoubled. Between 12 and 1 it seemed to all of us that final dissolution had come. Pulse and respiration were imperceptible. A peculiar death-like pallor stole over the features, the clammy perspiration was positively chilling to the touch. The family and friends gathered about the bed in despair. Hypodermics were continued every ten minutes under the protests of the family, and when it was uncertain to ourselves whether we were injecting living tissues or a corpse. An hour of this suspense and Dr. Bear noticed a faint flicker of the radial pulse. Slowly the respiration and pulse improved, a little color returned to the features, a little warmth to the surface of the body. Reaction had set in. Evidently the hemorrhage had ceased. Nearly one grain of strychnia, one-twenty-fifth grain of nitroglycerine, over a drachm of tincture digitalis, and a lot of brandy had been injected. As soon as reaction seemed well under way operation was insisted upon should reaction become firmly established. Consent was given, and everything else left to my judgment.

Realizing that in this operation, in the desperate condition of the patient, everything depended on the deftness of the operator, I brushed aside any ambitions I may have had to make a master stroke in capital surgery, and telephoned to Dr. J. E. Summers, of Omaha. He arrived at midnight, after a wild ride on a special engine from Columbus. Our diagnosis was confirmed, and as reaction seemed permanent and the pulse growing stronger, operation was deferred till morning. The patient regained consciousness at 6 A. M. Dr. Summers operated at 9 A. M., removed nearly a quart of blood clots from the pelvic cavity, ligated and removed the tube and the product of conception, irrigated the cavity with several gallons of warm sterilized water, and closed the cavity in about forty minutes. During operation patient stopped breathing once and artificial respiration was practiced for a few minutes, and one-twentieth grain strychnia and fifteen minims tincture digitalis was injected. As soon as the patient came out from under the influence of chloroform one-half grain of morphia was administered and repeated at variable intervals, under the instruction of Dr. Summers, who suggested very forcibly that the patient was to be kept narcotized till the following day.

The patient made an almost uneventful recovery, the only complication being an irritable rectum, lasting about five days, due, as I suppose, not to infection, but to exudative peritonitis of the left side of the pelvis.

CASE II.—A Bohemian woman of 30, the mother of six children, having passed two weeks over the menstrual period suddenly began to flow profusely and with a good deal of pain accompanying the flow. The pain becoming tormenting by the fifth day, I was called. On perfunctory examination an incomplete miscarriage, with some pelvic peritonitis, was diagnosed, and some decidual debris curetted away. The temperature was 102, pulse 120. Morphia was given to relieve pain. Next day pulse was about 100, temperature normal, but considerable tenderness both sides of uterus. Five days later I again saw patient, who was suffering great pain, had a heavy dragging-down sensation and irritation of bladder and rectum, tenderness on both sides of uterus, with some bulging. Temperature normal, pulse 100. Suspecting infection, I again irrigated uterus, but results were negative,—the cavity was clean. Somewhat puzzled, I began closely investigating a case which undoubtedly differed from the every-day incomplete miscarriage and which I had but superficially examined before. Closer examination revealed a bulging of Douglas's cul de sac and of the upper vaginal wall on either side, more on the right; fixation of uterus; a bogginess by bimanual examination; bulging masses, extremely tender to the touch, noticeable to the eye, pushing up the lower abdominal wall on either side of uterus,

Digitized by Google

the right one largest and most tender. Acute salpingitis occurred to me, of course, but neither pulse, temperature, nor facies indicated sepsis. Salines, anodynes, poultices over abdomen, and frequent hot vaginal douches constituted treatment for a few days without any particular amelioration of the most prominent symptoms. I therefore proceeded to evacuate the effused material, as I had determined to do several days before, but put off from day to day, mostly on account of the extremely unsanitary surroundings. Under chloroform anesthesia a small trocar and canula were pushed through the wall of the sac a little to the right side, but nothing coming through the canula on withdrawal of trocar a bistoury was passed along the canula as a director and the opening enlarged to one-half inch, with the result that considerable dark clotted and liquid blood escaped. It was estimated that altogether a pint of blood clots escaped. The wound was open for ten days and the quantity of liquid discharge could not be estimated. In spite of the omnipresent filth, infection did not occur and not a drop of pus ever came from the opening in the cul de sac. The patient began at once to improve and made an uneventful recovery.

Somebody in this society will be shrewd enough to suggest that I have not proven this to be a case of rupture of a tubal pregnancy, but a pelvic hematocele. To this it must be replied that as our knowledge of intrapelvic pathology increases, pelvic hematocele, dependent on varicose veins or congestions of the pelvic arterio-venous system, decreases. A pelvic hematocele may occur from violence and it is conceded possible for it to occur as a result of sudden menstrual suppression induced by cold or fright, intense congestion resulting, a vein giving way. In the case reported the symptoms pertaining to the uterus were those of a miscarriage, and hematocele from causes other than tubal hemorrhage does not seem reasonable. The following letter from Dr. J. E. Summers, Jr., written in reply to one describing the case as fully as I have given it above, is confirmatory of my position:

"OMAHA, August 13, 1897.

"DEAR DR. LONG: Evidently you have a case of ruptured tubal pregnancy. When veins of broad ligament are varicose you may get a hemorrhage, but this is exceedingly rare. Tait says, and so also Joseph Price, that they are all of tubal origin.

"J. E. SUMMERS."

It should be noted that Dr. Summers mentioned Case I in an article on "Tubal Pregnancy" in September, 1896, number WESTERN MEDICAL REVIEW.—F. A. L.

GENERAL SEPTIC PERITONITIS.—I have opened, drained, and washed out the peritoneal cavity in many cases of diffuse septic peritonitis, and I am free to confess without a single successful result. All of my patients died in from a few hours to a day or two after the operation, of sepsis, in spite of heroic stimulation and in some cases of frequently repeated irrigation with sterilized water, decinormal salt solution, or mild antiseptic solutions. On the other hand, some surgeons report a fair percentage of recoveries after laparotomy for what they call general septic peritonitis. Krecke has collected 119 cases of laparotomy in general peritonitis, in which there were fifty-one recoveries and sixty-eight deaths. A. J. McCosh operated between 1888 and 1895 inclusive in forty-three cases of general septic peritonitis. Of these thirty-seven died and six recovered, a mortality rate of about 86 per cent. A free abdominal incision was made in all, and with few exceptions irrigation was employed.

Stomach treatment must be limited to the administration of liquid food and stimulants. If, as is so frequently the case, nausea and vomiting are prominent symptoms, rectal enemata are of the greatest value. The distressing thirst can be effectually relieved by high rectal enemata of warm water, and if these are not tolerated, by hypodermic infusion. Some authorities favor cathartics, others condemn them and rely upon opium. Mr. Tait taught us years ago the value of saline cathartics in the prevention of peritonitis and in its treatment during the incipient stage, and his teachings and practice are not only supported by clinical observation, but have been substantiated by experimental investigations. He has found the most efficient treatment for septic conditions following abdominal section to be thirty or forty grains of sulphate of magnesium repeated every hour or every other hour until the bowels move freely. I have seen many cases of threatened peritonitis after abdominal section aborted by the timely administration of saline cathartics. If the stomach is intolerant, calomel in small doses, repeated hourly, and saline enemata are indicated. One of the great dangers in peritonitis is rapid distension and paresis of the intestines, conditions which are provoked by opium and which can be most effectually averted by early and free catharsis. The use of cathartics is, of course, absolutely contraindicated in all cases of peritonitis caused by perforation. In such cases the use of opium is legitimate and useful, as it diminishes shock, and lessens the extravasation of septic material and its rapid diffusion over the peritoneal surface. Shock, general debility, and, as Fritsch has shown, a weak heart increase the danger from sepsis. Strychnine, camphor, and alcoholic stimulants should be employed early and at short intervals in all cases of grave peritonitis. The application of ice or the cold coil over the abdomen frequently succeeds in diminishing tympanites and should be employed to prevent overdistention and paresis of the intestines when this condition appears, and the state of the peripheral circulation is good. If the heart's action is weak and the capillary circulation sluggish, hot applications are more agreeable to the patient and a better stimulant for the feeble peripheral circulation.—Nicholas Senn.

THE INTELLIGENT COMPOSITOR.—Ours is a marvel. We wrote: "Is there no balm in Gilead?" Supposing we didn't mean it, or were mistaken in the town, our compositor slung it up "Goliad." But that's a small matter. Some years ago, in compiling a mortuary report from exchanges, we wrote: "Dr. Jno. B. Bailyhache, æt. 74 years, born July 20, 1822, and died —." Imagine our consternation on finding the proof sheets to read: "Dr. Jno. Bellyache eat 74 ears corn July 20, 1822, and died —."—Texas Medical Journal.

Digitized by Google

Practical Surgery.

By J. E. Summers, Jr., M. D., Omaha, Neb., Prof. of Surgery, Omaha Medical College

I.

TREATMENT OF WOUNDS.

Effect of Bacteria on Wound Healing.—The most important principles underlying the treatment of wounds are based upon a clinical comprehension of bacteriology, however desirable it may be for the practitioner to have a combined laboratory and bedside knowledge. It should be well understood that the introduction of micro-organisms into wounds is responsible for most ill effects, except those due directly to the nature of the wound. This introduction of micro-organisms into wounds can, in those inflicted by the surgeon, be prevented, and in the treatment of all wounds means are at command to nullify or modify any serious results caused by micro-organisms. When these things are understood, then add a knowledge of the life-history, mode of entrance, and growth within the tissues of the body of those micro-organisms and chemical products most often known to be the cause of the bad behavior of wounds, locally and constitutionally.

The marvelous decrease in death rate from wounds, either surgically or accidentally inflicted, and the limitations of the spread of infectious diseases, are all the result of the work of laborers in the field of bacteriology and experimental medicine. Among the numerous germs we need only consider the chief ones acting as etiological factors of surgical wound diseases.

Divisions of Micro-organisms.—There are three chief divisions of micro-organisms which we have to bear in mind: 1. *Micrococci*, which are cells, either round or oval in form, and may be found singly, in chains, or in masses. 2. The *Bacilli*, which are rod-shaped cells, found singly, in chains, or swarms; their length is more than twice their breadth. 3. *Bacteria*, which may be rod-shaped, but when so their length does not more than equal twice their breadth; they are also oval in form, and are found single, in chains, or masses. All of the different forms of micro-organisms are now quite commonly spoken of under the general heading of *Bacteria*. They all have the property of a marvelous reproduction, millions being generated from a single bacillus in a few hours. All bacteria are of vegetable origin.

Many bacteria are capable of producing irritation and inflammation of wounds. They act either directly or by chemical products formed as a result of their known peptonizing action upon the albuminous substances. These are poured out upon the wound area and are intended by nature as reparative material. This peptonizing action results in the production of what is called pus. The so-called pyogenic (pus-forming) organisms are chiefly responsible for this peptonizing action, confined at first to the surface of the wound, but later penetrating into the tissues themselves. In some cases either bacteria or their chemiaal products penetrate into the deper tissues of the wound or enter the general circulation, producing more extensive local irritation or severe intoxication. Ordinarily, the only organisms (cocci) which cause the formation of pus are the staphylococcus pyogenes aureus and albus (which form in clusters) and another much more dangerous organism, the streptococcus pyogenes (cocci which form in chains). The Tetanus Bacillus is also of importance. When, as is a common occurrence, wounds which have been exposed to micro-organism infection heal without the formation of pus we know that either something prevented the peptonizing action of these organisms upon the albuminous elements of the wound secretion (exudate), or that nature was able in the struggle for supremacy (the battle between the organisms and the vital elements of the body) to conquer. Bacteria usually grow rapidly at a temperature ranging from 75° to 104° F. Those which grow at the lower temperatures tend to cause a putrefactive condition in the wound secretions; those which grow most rapidly at the higher temperatures are commonly those producing diseases of a more or less typical kind and are called *pathogenic*. The history of epidemic diseases has proven that severe cold does not kill many bacteria, the disease reappearing upon the return of the warm season. Dry heat is not a reliable agent to kill micro-organisms, but moist heat, boiling water or steam, because of its greater penetration, will kill every variety of bacteria. Many chemicals have the power of killing bacteria and at the same time, when used judiciously, do not act in a harmful way upon wounds. A utilization of our knowledge of the action of both heat and these chemicals upon all micro-organisms is the basis upon which is built the modern treatment of wounds,—the Aseptic and Antiseptic Methods.

Aseptic Surgery.—By Aseptic Surgery is understood the employment of known means (chemical and mechanical) in the sterilization of the hands of operators and assistants, instruments, and all dressings and material used. The sterilization of the tissue area of the wound about to be made must also be complete and the wound protected from contamination from all sources. After the incision or puncture no chemical agents having irritating or sterilizing properties are allowed to come in contact with the raw surfaces. The dressings applied must be sterile, but contain no chemical.

Antiseptic Surgery.—Antiseptic Surgery is the embodiment of all the details of Aseptic Surgery and in addition the use of chemicals upon the wound surfaces during the progress and after the completion of the operation. The idea being to inhibit by the use of chemicals the possible ravages of bacteria which may have gained entrance into the wound because of a faulty technique or preparation upon the part of those concerned in the carrying out of the operation. With few exceptions all wounds not made by the surgeon demand antiseptic treatment. The employment of certain chemicals (antiseptics) is intended to kill or to weaken the power of any germs which possibly have infected a fresh wound. If suppuration is already established these chemicals stop fermentation and putrefaction, and protect the patient from the more severe local and constitutional effects of wound infection.

Digitized by Google

Drainage.—Another cardinal principal of antiseptic surgery is to provide for drainage in wounds where there is suppuration, and to so care for these wounds that all discharges will be received into dressings impregnated with antiseptics which will prevent putrefaction of discharges. Antiseptic dressings are also employed to keep germs from gaining access to a wound after the completion of an operation, or to prevent reinfection of a disinfected wound.

DR. W. D. HAMAKER, of Meadville, a member of the State Board of Examiners of Pennsylvania, quotes, in the Pennsylvania Medical Journal, some "gems" from papers handed in by a number of applicants for certificates at the examination held last June. A few samples of spelling, each from a different source, are as follows: "tong," "sauts," "serratim," "flyes," "shugar," "fur-tree," "roachsheelsalts," "pultz," "puss," "corpustcle," "pacients," and "Beene." Among answers to questions the following deserve first mention: "Hydrogen gass is degenerated from the urea." "Cantharides is derived from the root of the plant." "Picrotoxin is an alkaloid of sena and rhubarb." "Spartein is derived from Sparta." "The uriniferous tubules secrete the semenal fluid." "The differential diagnosis between epilepsy and hysteria is that in epilepsy they fall on the stove and burn themselves and in hysteria they don't." "The endocardium is a mucous membrane which weighs two ounces and is separated from the pleura by the paricardium." A new diagnostic symptom was offered by another man who stated that "in cerebral hemorrhage the patient may vomit the cerebrospinal fluid!"

When it is remembered that all these "doctors" held diplomas, certifying with more or less flourish to their educational and scientific acquirements, there can be but little doubt as to the advisability of restrictive legislation in the matter of medical education.

A CRY FROM VIRGINIA.

The following editorial from the Virginia Medical Semi-Monthly shows the sorry conditions surrounding the physician in Virginia. Most of the conditions, however, are not confined to Virginia by any means:

"It is quite an expensive item to be a doctor in Richmond. The state of Virginia for the past ten years or more has been charging $25.75 for the license of a city doctor who has been in practice five or more years; and for the past two years or more those who practice in Richmond have been arbitrarily assessed by a committee of the city council, in addition, a city license tax varying from $20 to $75—the doctor of average prominence having to pay from $40 to $60 a year. An attempt was recently made to have the city assessments raised; but finally the committee of the council, in a spirit of condescension, it appears, decided to let the license taxes on doctors remain as they were according to last year's assessments. This consent of the committee of the city council not to raise on the assessments of last year was gained after hearing the facts and arguments of a committee of representative members of the Richmond Academy of Surgery, which ought to have convinced any one of the injustice of taxing doctors at all for licenses to practice.

"Look at it from almost any standpoint, the doctor occupies a special and peculiar position in any community. In the south, at least, his is not a money-making profession. If he collects enough of the fees that may be due him to keep himself out of debt, it is extremely rare to find a practitioner who accumulates an amount from his patrons sufficient to keep himself and family from want if broken down health or old age overtake him. And if he dies while in the enjoyment of what is supposed to be a comfortable success, his wife and children soon feel the pinch of poverty. It requires no mention of illustrations as to the truth of this statement. They are found in every town and county. Give us the record of the death of the good physician of his community, of the crowded church on the funeral occasion, of the coffin covered with flowers, of eyes moistened with tears, and feeling weighted by grief as the procession moves slowly on to the last resting place; and there, nine times out of ten, will be found the grave marked by no shaft, and widows and orphans who soon become penniless and forsaken. The amount of money this good doctor has expended in books and instruments and equipments generally to enable him to make himself essential in his community all goes for naught on the auction day; and yet, on these very things he was assessed and taxed as if it were valuable property. Then take his visiting lists and practice account books, and see what can be made out of them. Whoever may be appointed to settle up the so-called "estate" is amazed to see how much of charity work was done. And yet for the privilege of doing this charity, state and town or county levies an onerous license tax! Go into any city and count up in dollars and cents the charity annually given by doctors who themselves are struggling for subsistence. The corporation may contribute a few hundred dollars for medicines, etc., but druggists and merchants get all of that for purchases made of them. Yet for the thousands of patients annually treated the poor doctors receive not a cent. A calculation based on the minimum fees of the profession of Richmond (which are lower than those of most cities of its size) will show that not less than $175,000 to $200,000 are annually given by doctors of this city alone for the care and treatment of the sick and wounded of the state. There is not a cent realized by the doctor on more than half of his legal claims. And yet the city and state are persisting in oppressing him by exorbitant license taxation. With all of this oppression, by license taxation, no part of his property or income over legal exemption amounts is released from the usual property or income tax, as charged against all others.

DON'T forget that an empty stomach is often the cause of sleeplessness. Have something in the stomach so that there may be a call for some of the blood of the system there, and not have it all go to the head. Don't overdo it.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$1 00
Single copies..... 10

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, NOVEMBER 15, 1897.

ELSEWHERE in this issue will be found three papers on tuberculosis, covering all the phases of the subject. They were read before the Utah State Medical Society last month. While we have to devote considerable space to this one subject, necessarily crowding out other matter, we believe no apology is necessary for so doing. The papers are all excellent, the different writers handling their parts of the subject in a philosophical and scientific manner.

WE commence this month the publication of a series of papers on Practical Surgery, by Dr. J. E. Summers, Jr., of Omaha. These papers, as indicated by the title, will be practical, covering only that part of surgery which is of every-day use to the general practitioner. They will also be elementary, for the elementary part of all knowledge is the most important. If the foundation is not solidly built, no outlay on the superstructure will make it of any value. Many of our readers who graduated previous to ten or fifteen years ago find themselves deficient in certain subjects that are now considered elementary and absolutely necessary; others who graduated later find themselves "rusty" in many things that are elementary. This series of papers by Dr. Summers, and other series which we hope to publish soon, covering other branches of medical science, are intended for this class of readers, for those who want to "brush up." Those who know it all now will, of course, not need such kind of reading.

GONORRHEAL VAGINITIS AND TREATMENT.

Led by Bumm, a number of eminent authorities have denied the power of the gonococcus to penetrate the pavement-epithelium of the adult vagina except under unusually favorable circumstances, and the extreme difficulty of curing gonorrhea in the female was attributed to the difficulty of getting the germs out of the cervical canal. Of late the tendency to widen the sphere of activity of the gonococcus has extended to the vagina and it is generally admitted that Bumm was mistaken in attributing such protective powers to its epithelium. Quite recently Bodenstein (Deutsche Med. Wochenschrift 42, '97) insists upon the frequency of a true gonorrheal vaginitis and upon the fact that it is in the retrocervical cul de sac that the disease persists in a latent form, when the ordinary methods of investigation indicate that the disease is cured. By scraping out the secretion from this cul de sac he has been able to demonstrate the presence of the gonococcus in a number of such cases, and after trying local applications of various standard anti-gonorrhoics he recommends tamponading the entire pericervical cul de sac with cotton soaked in 10 per cent. ichthyol-glycerine. This loosens up the old epithelium and brings to the surface germs previously hidden deep beneath the surface. Its use may be followed, if necessary, by the application of some other germicide.

THE TRANSMISSION OF TUBERCULOSIS.

Some months ago reference was made in these pages to experiments by Flugge on the factors involved in the transmission of germs through the air and their bearing on general surgery. Since then a full description of these experiments has appeared (Zeitschrift fuer Hygiene XXV, 1); and more recently still Flugge has discussed at length (Deutsche Med. Wochenschrift, 42, '97) the conclusions to be drawn from them as to the etiology of tuberculosis. He insists that the correct idea that the main danger of contagion from tuberculosis consists in the inhalation of minute particles of dried sputum is unquestionably exaggerated. For dust particles to be kept in suspension for any length of time by the currents of air which ordinarily occur in living rooms, they must be exceedingly fine, and Flugge holds that it is seldom that natural agencies reduce dried sputum to dust of this required fineness. The classical experiments of Cornet, which demonstrated the almost constant presence of the tubercle bacillus in the dust of rooms inhabited by consumptives who were careless with their sputum, do not prove that the germs were not adherent to such large particles that the danger of their being inhaled would be comparatively slight. On the other hand, Flugge's experiments show that in loud or lively conversation, and still more in coughing and sneezing, germs are carried out with particles of water so minute that they remain suspended in the air for a considerable length of time and are carried for a distance of several metres. Attempts to inject the lower animals by causing them to inhale dried and powdered sputum have, as a rule, given negative results; while when a fine spray of the diluted sputum has been

Digitized by Google

used positive results have uniformly been obtained. In one case, indeed, the janitor who was spraying the animals' cages failed to observe the necessary precautions and was himself taken with a rapidly fatal phthisis. Koch, in one of his early contributions to the subject, suggested the possibility that in the immediate vicinity of a consumptive there might be danger of infection through freshly expectorated particles of sputum; but as he supposed that these particles must necessarily be so arge as to sink quickly to the ground, he considered the danger slight. These experiments of Flugge, however, show this danger to be much greater than has been supposed, and suggest that phthisical patients be urged to cultivate subdued style of conversation and in coughing or sneezing be careful to protect their neghbors by the use of the handkerchief. GIFFORD.

NO MORE GUESSES.

The advancement made during the last few years in methods of diagnosis, to say nothing of treatment, whether medical or surgical, demands of the honest physician—he who strives to do his duty to his patient—a more thorough knowledge of all that pertains to bacteriologic and pathologic methods of investigation, than has heretofire been thought necessary. A test tube and an alcohol lamp, with a little nitric acid, is not sufficient nowadays for the examination of urine. A knowledge of the microscope, and the application of that knowledge, is needed. But these are not enough. The physician who attempts to keep up with the progress of the times, and who desires to do for his patients all that the science and art of medicine makes it possible for him to do, realizes the fact that the microtome, the centrifuge and its accessories, and the necessary equipment for bacteriologic examination must be added.

The time will soon come when the diagnosis of typhoid fever will not be delayed until the disease has run a week or ten days. Whether the diazo-reaction of Ehrlich, or the Widal serum test is yet reliable or not is undecided, but without doubt an absolutely reliable early test will soon be perfected, so that the up-to-date physician will not worry along for days before he can tell whether he has a case of typhoid or not. The well equipped and well qualified physician has no excuse for guessing whether that case of sore throat is diphtheria or not. Guessing must be done away with, and knowledge substituted. No continuing success can be built on guess work. He who attempts it will soon find that he is being left in the rear. All our better schools are turning out young men who are well equipped in this regard, and those who lag behind will find themselves behind in more ways than one. It is an absolute necessity to-day, and is getting more and more so, that the physician shall have the necessary tools and know how to use them. A large outlay of money is not necessary, forty or fifty dollars, besides a good microscope, is amply sufficient.

TREATING SYMPTOMS.

One of the things to which the profession resorts, when it does not know what else to do, is to treat symptoms, or, as it is more generally called, meet indications. It does this when unable to do better. Seldom, however, with any great degree of intellectual satisfaction. Most practitioners realize that it is empirical and rests on no sufficient pathological knowledge. Our pharmacology, to be sure, is most praiseworthy, but the fact that we have a scientific knowledge of the physiological action of drugs or of certain medicines does not save us from the charge of empiricism if we use the agents against symptoms, the pathology of which we have no adequate knowledge. For, though digitalis will slow the heart's action, its exhibition in tachycardia may or may not be a good thing. This will depend on the etiology or pathology of the rapid pulse.

The question of treating symptoms is raised by Dr. Mereness in a most learned article appearing in a recent number of the Medical Record, entitled "A Plea for Therapeutic Conservatism." The author treats the subject in a most exhaustive as well as fundamental way. In the study of biology the cell seems the point of attack. Huxley long ago pointed out that protoplasm was its chief constituent—that it was the basis of organized bodies, and that its chief function apparently is to change potential into kinetic force, or to reverse the process.

In view of what is already known of cell life and metabolism, as well as of cellular pathology, to say nothing of the edge of the future, the present policy of treating symptoms is likely to fall into disuse. Then the educated physician will not upon the arrival of every mail have his intelligence outraged by "medical literature," in which the manufacturing chemist presumes to instruct him as to the proper remedies for meeting certain indications. The extent to which this practice now prevails is one of the evidences of our ignorance and perhaps, too, of our gullibility.

The study of phenomena in living protoplasm, as every one must know who is familiar with the amebe and its habits, reveals the fact that one of its chief characteristics is irritability, and that this may be excited by certain external agencies, as mechanical motion, heat, electricity, light, and chemical actions as mineral or vegetable poisons. Too powerful a stimulus may destroy the irritability, while a milder one excites activity with, presumably, increased metabolism

Digitized by Google

and its accompanying liberation of energy. This is one of the essential characteristics of vital force, by which the organism seeks to maintain itself and to perform its normal functions, that is, keep its health. Its environment meanwhile tends to destroy its organic structure or to cause its death. In some way to defeat the tendencies of its environment is the constant aim of every biological unit. This, then, is the lesson of the external stimulus, namely, that the cell has the power, more or less perfect, of self-preservation. When irritated by injurious surroundings the ameba seeks, by cell activity, to evade them. But when in contact with food stuffs this activity is employed in its appropriation. Evolution has pointed out that the cell may, within certain limits, adapt itself to its environment, so much so, indeed, that change of surroundings may produce change of type.

Maupas demonstrates "that certain salt water infusoria, when removed to fresh water, died at once. However, when change was made gradually, the organism not only lived, but lost entirely its salt water characteristics and became like the analogous fresh water varieties. When the animal was returned to salt water its former characteristics returned. Here is seen an attempt, and a successful one, of a living organism so to change its structure as to be able not only to resist external influences, but also to assimilate material which it had been unused to, and thus maintain itself in its new surroundings." Thus showing that in the struggle for self-preservation the cell strives to adapt itself to new surroundings and new conditions.

Now this is what happens in disease and is the scientific, or at least the biological explanation of that classical expression, vis medicatrix natura. If then, it be true that within certain limits protoplasmic cells have the power to protect themselves from baneful surroundings, then manifestly they exercise that power when attacked by disease. For example, in acute infectious diorders that are due to bacteria, these pyogenic organisms act in two ways: First, in true parasitism, by depriving the protoplasmic cell of nutrition, and second, by the poisonous action of their ptomains upon those cells. We have seen, however, that these cells have a limited power of adapting themselves to their surroundings. In this way they acquire a certain immunity against the poisonous products of the bacteria. The irritant effect of the ptomains upon the cells increases their metabolism, causing the train of phenomena known as inflammation and fever, and sometimes death. But this does not occur if the cell with its own peculiar methods is able to make a successful fight for existence. Have we any therapeutic agents that will help it in its struggle? That we have is extremely problematical. What may be done in the field of serum therapeutics one cannot even guess, and so must wait and hope. Meanwhile we are restricted, for the most part, to the old therapy, which seems to have little power in directly antagonizing the irritant action of the ptomains upon the cell, which goes on increasing its activity with the accompanying phenomena of increased frequency of pulse and rise of temperature. By the use of any one of several medicines we may slow the heart's actions or reduce the temperature, but these are not the disease per se; they are only its manifestations. Although these phenomena may disappear upon the exhibition of certain remedies, the mischief itself still goes on. Instead of assisting nature we very likely have hindered her.

However, in regard to medicine we do not wish to be considered as skeptical or even hypercritical. But then we cannot hide the fact that when disease is looked at from a causal point of view it requires greater scientific attainment to know when not to administer a drug than it does to treat symptoms.

Notes and News.

DR. ALLEN H. MILLER has removed from Wolsey, S. D., to Sundance, Wyo.

A WEEKLY medical journal has just been started in Berlin which is to be devoted to consumption. This is specializing with a vengeance.

DR. A. C. BEHLE, resident physician of St. Mark's Hospital, Salt Lake, is doing post-graduate work at Johns Hopkins Hospital, Baltimore.

AT its meeting held in New York October 12 to 14 the New York Medical Association unanimously voted to give $2,000 from its general fund for the Rush monument.

GLASS is now being used for filling teeth, and, it is reported, answers the purpose admirably. By a new process it is made soft and malleable, and is easily manipulated.

DR. JAMES E. PILCHER, of the army medical department, has been transferred from Columbus, O., to Fort Crook, Neb. Dr. Pilcher is secretary of the Association of Military Surgeons of the United States, and editor of the official organ of that society.

THE New York State Medical Association is the only state society in the country which has a permanent home of its own. It owns the Mott Memorial Hall, a building in New York worth $80,000. It contains a library, well equipped and well supplied with medical journals of the day.

DR. G. N. JONES, of Jackson, Tenn., committed suicide on October 9. He left a note stating that he had taken seven grains of morphine, and hoped it would

Digitized by Google

land him in hell. Dr. Jones graduated in medicine last spring in New York, was popular, and no reason is known for his rash act. He was only twenty-three.

Dr. Sanarelli, who discovered the bacillus of typhoid fever, announces that he has discovered a curative serum, and will immediately publish the results of his experiments.

Dr. E. C. Rankin, of McLouth, Kan., calls attention to an error in one of his prescriptions on page 294 of the October number of the Review. Instead of three ounces of tr. ferri chlor. it should read three drams.

Medical schools unprovided with modern facilities for teaching should not be recognized by any board of health. A school not fully equipped should be suppressed. The time has come when medical men should speak out in regard to certain medical schools whose only moral right to exist lies in the fact that they have a legal charter to grant diplomas.

Newton L. Bates, surgeon general of the navy and President McKinley's family physician, died at Washington, D. C., October 18, from renal trouble. He was appointed surgeon general about two weeks before his death to succeed Surgeon General Tryon, and was obliged, on account of the illness which resulted in his death, to take the oath of office in bed.

Birds in Hospitals.—One of the wards in the Middlesex Hospital, London, is known as the "Bird Ward." Some years ago a lady who was a great lover of birds was occupying a bed in the ward and longed for the sweet songs of her pets. When she left she asked permission to supply the ward with birds, and since then the sweet songs of the forest continually greet the patients' ears.

In the spring of 1895 Dr. Van Fleet, of New York, objected in strong terms before the New York County Medical Society to the admission of an advertisement of an optician named Mockeown to the Medical Register. Suit was brought against the doctor for $40,000 damages, and at a trial had last month before a jury a verdict was rendered for the doctor on the ground that the remarks he made constituted a privileged communication to the society.

Mrs. Baird, a christian science healer of Kansas City, was fined $50 on November 9 for failing to report to the board of health a case of diphtheria she was treating. The case was appealed. G. H. Kiney, the father of a little girl which had just died under Mrs. Baird's treatment, signed her appeal bond. The father and mother of a little girl who had died of diphtheria under christian science treatment were also arrested. They refuse to give the name of the christian (?) healer who attended their child. "What fools we mortals be."

A certain eastern firm has been doing some very unique and attractive advertising of friable pills. We recently had some experience with the pills, however, which makes us a little cautious about believing all that advertisers may say. Commencing in the morning, we gave a little fellow during the day eight one grain quinine pills of the friable variety. No result followed, but the nurse next morning showed six of these which had passed intact through the alimentary canal. The trouble was, the poor little mortal did not carry in his stomach a hammer and board with which to crack them open. A pill to do good must be covered, if covered at all, with something that the juices of the digestive track will act upon, and not necessarily that can be crushed between the thumb and finger. The average human being does not carry a hammer in his stomach.

Miscellaneous.

Homeopathic Treatment.—A lady practitioner of one of the "pathies" of the day recently related a very interesting though somewhat arachnidan tale. Some years since she had "nervous prostration" and at times saw spiders and mice and rats running about the room and upon her clothing. The vermin proved very rebellious to treatment and, after suffering many things and trying various remedies, she wrote, describing all her symptoms, to the dean of a prominent eastern homeopathic school. He forwarded her one powder, with explicit instructions as to when to take it and assuring her of a cure. Of course a cure resulted. Some time later the sufferer met her deliverer and asked what he had given her. He, a true disciple of similia similibus curantur, informed her that, as she seemed mainly to travail with spiders in her delusions, he had administered to her the pulverized corpse of a tarantula and he was not at all surprised to learn of its prompt and favorable effect. This story was told in good faith to the writer directly by the chief actor in the little therapeutic drama, who now administers "divine" and mystic "healing" to all who may apply.—Cleveland Journal of Medicine.

A famous Vienna surgeon was asked, by telegraph, how much he would charge for a capital operation on Reb Chaim Rosenbaum, a young, promising merchant in darkest Polish-Russia. The reply was that 5,000 gulden ($2,000) would be a fair compensation for the job. After various more or less dignified negotiations it was agreed that the desired amount should be paid after the operation was performed. The surgeon left sunny Vienna at once to emerge, after a thirty-six hours' journey, in the garlicky atmosphere of a small Polish town. There he was met by a congregation of long-bearded and long-coated individuals with long, weary faces, who explained to their grief that the life-saving professor was too late this time, and that good Reb Chaim Rosenbaum was gathered to his fathers last night. The surgeon's disappointment was so much greater, as the mourning survivors did not show any symptoms of willingness to reimburse him for the trouble. He concluded, however, to take a recreation from the hardships of the journey and to stay for a day. The population heard of the presence of the celebrated surgeon, and it did not take long till the master of the scalpel saw himself surrounded by a crowd of

Digitized by Google

surgical cases. So he was kept busy operating the whole day, receiving fees of fifty to one hundred gulden from each patient, so that, while not getting the stipulated 5,000, he had earned at least a fair remuneration for his trip. When, on the following day, he had just climbed into his compartment at the railroad station, an old Polish gentleman, with an Iscariot face, most politely approached the professor, wishing him a lot of good things, praising his skill and many other virtues, and finally saying that the whole town was forever under deep obligations to him; and to show his everlasting gratitude he would confide a secret to him. The professor became already unwilling to listen to the linguistic Salto Mortales of the "Noble Hearted," but how great was his surprise when he heard the following confession: "Don't you know, dear professor, that there is some mistake about Reb Chaim Rosenbaum's premature end, and that in fact he found it preferable to stay with us instead of being gathered to his fathers. Among the many patients you operated upon yesterday, you also operated upon Reb Chaim Rosenbaum, and, God bless you, you were satisfied to take 50 gulden instead of 5,000. Thanks to heaven and to the greatest of the great professors, he is on the road to recovery. Great is your kindness and great is Allah!" The professor made an unsuccessful effort to smile, the locomotive began to puff, and the devout Iscariot withdrew, devotedly keeping his flexible spinal column rectangular to his thin and crooked femurs.—Ex.

LESIONS PRODUCED BY THYROID EXTRACT.—H. J. Berkley (Bulletin of the Johns Hopkins Hospital, July, 1897) has investigated the various lesions induced by the action of thyroid extract on the cortical nerve cells. Taking into consideration the very grave symptoms of a toxemic nature observed in so many cases of thyroid administration, more particularly those involving cerebral and vasomotor functions, the author undertook a series of observations with the view of ascertaining the nature of the lesions. The first portion of the investigation was made upon patients in an insane asylum. In each case a pill containing five grains of fresh sheep's gland was administered daily, which was subsequently increased to two or three, depending upon the results. There was loss of weight, tachycardia, and enfeeblement of the cardiac action in each instance, with increase of cutaneous transpiration, irritability, and more or less mental and motor excitement. This occurred in all cases, no matter how depressed or demented the patients had been previous to the administration. One patient died before the excitement had subsided, with evidence of acute tuberculosis, and the others showed an edematous condition of the integument of the forehead and cheeks similar to that observed in myxedema. All showed more or less restlessness, with both mental and motor excitement, and in some instances there was considerable mental improvement, though not in all. In view, therefore, of the effect on the mental condition of the same patients, it was decided to administer thyroid to animals, in order to examine their nerve tissues. Five mice and three guinea pigs were treated with thyroid extract. In the case of the mice there was swelling of the face, some emaciation, and loss of strength. In the guinea pigs the general symptoms were similar, and in all cases the administration was continued till the animal died. Microscopic examination of the cerebrum was made in all cases, both with the silver phospho-molybdate and other staining methods; no lesion was found of either nerve elements or neuroglia; there was no varicose or atrophied dendrites or loss of gemmulæ. The corpora showed no loss of angularity, and the axons and appendages were all healthy. No nuclear change in the cells could be ascertained, and the blood vessels were carefully examined without the discovery of any lesion. It would seem from these investigations, so far as they go, that the toxic action of thyroid is of a different nature from that of other conditions, and one which we are not, therefore, in a position to understand.

THE AGGLUTINATION OF TYPHOID BACILLI BY CHEMICAL SUBSTANCES.—Malvoz (Ann. de l'Institut Pasteur, July 25, 1897) has investigated the action of various chemicals upon typhoid bacilli. In the first place, he finds that certain bodies, such as formalin, corrosive sublimate, peroxide of hydrogen, and strong alcohol, coagulate the bacilli and produce a fairly typical agglutinative reaction, but only when used in concentrated solutions. The essential characteristic of the typhoid serum in this respect is, however, its power of acting when extremely dilute, and the author's next endeavor was to find some chemical substances which should have a comparable action. Chrysoidine, which is stated by Blachstein to agglutinate cholera vibrios, was found by Malvoz to have no action on typhoid bacilli, nor was any reaction obtained with induline and nigrosine; safranine and vesuvine, on the other hand, gave the typical reaction even in very dilute solutions, and the agglutination was rendered more obvious by the slight coloring of the bacilli. Thus 3 drops of a 1 in 1,000 solution of these reagents added to a 1 c. cm. of typhoid emulsion produced the characteristic reaction just as the blood of a typhoid patient would. Mineral acids, phenol, lactic acid, and chloroform have no agglutinating power, while salicylic acid and strong solutions of potassium permanganate give a reaction which is by no means characteristic. Caustic soda and ammonia do not agglutinate bacilli suspended in distilled water, but act on them if in tap water, a difference no doubt associated with the deposition of calcium carbonate. Salimbeni's experiments on the part played by oxygen in agglutination are not confirmed by Lambotte. Malvoz finds that an artificial "typhoid" serum can be made by adding 1 c. cm. of a 1 in 1,000 solution of safranine to 9 c. cm. of ox serum. He suggests that as the urine of typhoid patients gives a marked diazo-reaction, the agglutinative power of their serum may be due to a nitrogenous compound allied to vesuvine or safranine. He has further applied his discoveries

Digitized by Google

to the differential diagnosis of bacteria; thus, for instance, a concentrated solution of formalin agglutinates typhoid but not colon bacilli, the difference being visible to the naked eye. Again, 1 in 1,000 safranine serum prepared as above causes agglutination of typhoid bacilli, while the colon bacillus is not affected by a 1 in 100 serum. Some further experiments tend to show that the ciliated envelope of the bacillus is the seat of the chemical changes leading to agglutination. Finally Malvoz suggests that his results may be applied clinically with advantage.

Correspondence.

"IS PROFESSOR RICHET CORRECT?"

Editor Western Medical Review: Professor Richet, in his recent address on "Pasteur," before the British Medical Association at Montreal, made the statement, that books on medicine written twenty years ago belong completely to another era; their pathology, etiology, prophylaxis, and treatment seem strangely antiquated. Is this statement correct? I think not. I would simply inquire, Does not Eberle, whose last edition on the practice of medicine, published in 1831, sixty-six years ago, describe disease accurately, except "Bacteriology," which is only in an embryonic state? How is it with Flint, whose latest works on medicine were written twenty-four years ago; how much does he differ, if at all, with Barthlow's last in 1890, or Osler in 1892, or Pepper in 1893?

The etiology, pathology, symptoms, and prophylaxis are positively the same, with the slight exception of the bacterial developments, which as yet are premature fledglings in science and for which it will take several decades before the citadel of accuracy will be attained, if ever.

We have advanced in the medical science more particularly in the last two decades in pharmacy, therapeutics, surgery, and gynecology, which improvements are without precedent. And yet, the oldest giants of our Materia Medica have not lost one iota of their prestige when indicated, and never will. Surgery has taken on several new phases, particularly in abdominal surgery and gynecology, asepticism being paramount with brilliant practical results. And yet, the old landmarks in all surgery, laid down by an innumerable host of the old surgeons, among whom are Bartow, Cooper, Reuben Mussey, Tait, Lister, McDowell, Gross, Prince, and, although, mentioned last, is not least, J. Marion Sims, have not or ever will take a back seat as surgeons as long as the everlasting hills resist the encroachments of Father Time. Their names are engraven indelibly on the pages of scientific fame, and will ever remain in dazzling characters, never to be effaced.

Is Professor Richet correct?

CASWELL T. POE, A. M., M. D.

Grand Island, Neb., November 10, 1897.

Yes, Dr. Poe, in spite of all this, Professor Richet is correct, to a very great extent, at least, and these men you quote, were they living to-day, would say the same. It takes nothing from their lustre. The workers of the past helped to make the conditions of the present possible.—Editor Western Medical Review.

"SHALL WE LET DOWN THE BARS?"

Editor Western Medical Review: I did not see the article in your September number signed "Regular," but have just read an article in your October number signed "More Regular," and evidently inspired by the article in the September number. I am surprised that a man of ordinary education and general information should write such a scurrilous and false article, and I am more surprised that a journal of the standing and apparent refinement of the WESTERN MEDICAL REVIEW should publish it.

I will only say in defense of my own school that the Association of Colleges of the American Institute of Homeopathy made a full three years' course obligatory before the Association of Colleges of the American Medical Association, and that the course was in turn advanced by our association to four years before the same action was taken by the Association of the American Medical Association.

In preliminary requirements our schools have been in the forefront. In all cases, in advancing the standard of medical education we have led, not followed.

The gentleman insinuates dishonest motives in a way to plainly indicate that his judgment of others is suggested by his own mental conceptions. He forgets that a large part of the most useful remedies of the Materia Medica have been taken bodily from the homeopathic literature, where they had been ensconced for many decades, and heralded to the so-called regular profession as new remedies, and that, too, without credit where credit was due. Instance calc. sulph., bryonia, pulsatilla, nitroglycerine, etc. He forgets that abuse is not argument, and strives to impress with generalization where, either from ignorance or cowardice, he dares not engage in detail. It would be well for him to remember that there are still left some honest people beside "ourselves." As a homeopathic physician I challenge anyone to show in any school better equipped schools or hospitals, a finer literature, a more highly educated or more honorable body than is found in the homeopathic school of medicine, and adjure the gentleman, whom I cannot blame for the use of a nom de plume, to save himself and his colleagues from such unnecessary discussion until the body politic of the homeopathic profession at least "knock," for until then they surely need not "open;" and I further assure him that such a time will never come until it is plainly evident that it will not necessitate mingling with men who write false and libelous articles while lacking the courage to affix their own names.

Respectfully, BENJ. F. BAILEY, M. D.

Lincoln, Neb., October 18, 1897.

The above letter was submitted to "More Regular," who sends the following reply:

Digitized by Google

Editor Western Medical Review: The MS., to the contents of which the enclosed is a much more extensive reply than I intended when I began, reached me on the 22d inst. However, since I now have the courage to affix my name to this communication, I hope I may be excused for its length, and, perhaps, forgiven for the "scurrilous, false, and libelous" article over the nom de plume of "More Regular" in your October issue. If it does nothing more, the brief article, by the man of "extraordinary education," confirms the truth of that old saying, "It is the wounded bird that flutters." Evidently the good doctor is pretty badly winged, or he never would have permitted himself to make the statement that "abuse is not argument," and condemn generalization in the same article, which I submit to the readers of the REVIEW contains but little else than vituperation and unsupported general assertions. Instance what he says concerning the three years' course and the four years' course, but forgets to tell us where to find the proof. He asserts that in preliminary requirements their schools have always been to the forefront, that "in all cases, in advancing the standard of medical education they have led, not followed." Again no proof. He says "the gentleman insinuates dishonest motives." I beg your pardon, doctor; I meant to speak out quite plainly, and if you will take the pains to read the article again you certainly cannot accuse me of insinuating when I said, "I use the term honest advisedly, for I claim that no one who possesses sufficient intelligence to acquire an education can be honest and claim to practice homeopathy." I said also "that there was no such thing in existence, except the name, as a homeopathic physician." Both of which statements, be they general or otherwise, are very easy to prove. I hope, Mr. Editor, that you will allow Dr. Bailey the privilege to answer, for I desire his help to prove the above statements.

First—I want his definition of homeopathy.

Second—I want him to tell us to what extent hypodermic medication is used in his school, and by this method what is the remedy and what the dose for a severe pain.

Third—Is mass hg. and hg. chlorid mite in five and ten grain doses compatible with the teachings of his school?

Fourth—Is the writing of prescriptions in which the different preparations of mercury, quinin, the iodides, and cuti cura, if you please, are designated in large doses in true accord with homeopathic principles?

Fifth—Since he constitutes himself spokesman for the body politic of the homeopathic profession in another matter under discussion, I will ask him to take it upon himself to either say that hypodermic medication and the above mentioned remedies are not used by members of his school, or that, if they are used, and in doses similar to those above and in accord with the indications in which they are employed by the regular school, then what is there to a homeopathic physician except the name?

Sixth—Are you not continually referring to regular physicians as "old school" and "allopaths," the former an obsolete term in so far as its applicability to the regular physician of to-day is concerned, while the latter is a misnomer and a word of purely homeopathic parentage?

Seventh—Do you not sometimes, when in the presence of certain people, give an evasive answer to the question, "What kind of a doctor are you, a homeopath or an allopath?" I have heard this answer by members of your school more than once, "I am a physician."

For fear that you will not answer these questions I will answer them in substance for you. You pose as homeopaths to get the patronage of those who, not knowing what it is, think they believe in homeopathy. By claiming to be a physician, you hope to "fool" a few and catch a large per cent. of the rest by causing them to believe that you practice "both ways," whatever that may mean. So much for the "insinuations" as to dishonest motives. Since your schools are so well equipped, I should like to have you tell the readers of the REVIEW the names and locations of your polyclinics and post-graduate schools. Is it owing to the overcrowded condition of these institutions that so many of your practitioners attend ours? If your literature is so fine and complete, why is not more of it and less of ours to be seen in the libraries of your practitioners? All of the homeopaths I have ever known have about five volumes by regular authors to one by homeopaths. On the other hand, all the homeopathic books to be found in our libraries are there simply as objects of curiosity and for the amusement the perusal of their pages affords. As to "the large part of the most useful remedies," etc., we do not use a great deal of plaster of paris internally, or if you mean the sulphide of calcium, we do not give it in infinitesimal doses. Bryonia and pulsatilla were never very popular with us, and since nitroglycerine was not discovered until 1847 and remained simply as an object of interest until 1864, and was not used as medicine until a few years later, it cannot have been "ensconced" many decades in any literature. I will give you additional opportunity to cover your school with glory by asking you to give us the names and achievements of your Harveys, Jenners, Kochs, Pasteurs, Simpsons, Sims, Rushes, Behrings, Senns, Murphys, and hundreds of others. And while you are about it, tell us why there is not a homeopathic school in all of Germany to-day. And why, when in 1889 the lay management of a certain hospital in the city of Philadelphia discharged from its staff every regular and appointed homeopaths in their stead and decreed that for a certain period nothing but strict homeopathy should be used, every physician on the staff expressed a determination to resign. Awaiting your further pleasure, I remain,

Very respectfully, J. LUE SUTHERLAND.

Grand Island, Neb., October 26, 1897.

VERY MUCH IMPRESSED.

Editor Western Medical Review: I have been reading your journal with pleasure. It is a clean, bright,

Digitized by Google

newsy, practical journal. I hope you will be able to continue to publish such a periodical as you are giving us.

I was much impressed with the article, "Shall We Let Down the Bars," page 282. Some three or four years ago my name was proposed for membership in the State Medical Society by Dr. Davis, now of Omaha, and was rejected because I graduated from the homeopathic department, University of Michigan. I graduated in 1883, having taken a three years' course. Not a few of the members of the state society graduated from schools requiring but two years and having a standard not equal to that of the University of Michigan. I do not speak of this boastfully, but in the name of fairness and justice. I have seen physicians that were back-numbers, moss-backs, but they claimed to be regular, and very regular, and looked down on a physician that had graduated from other than a so-called regular college. Such things make one exceedingly tired.

I was called in counsel with a regular that was treating a case of sepsis following labor for typhoid fever. He told me that he was willing to meet me, but knew nothing of homeopathy. I told him that I was not present to counsel relative to homeopathy or any other opathy, that I was there for the benefit of the patient, and that I considered myself competent to discuss matters medical as understood by physicians generally of to-day.

Once upon a time I was called in counsel with a young man, a regular, and he condescended to tell me that among other remedies he was using digitalis and supposed that I probably knew what it was. The fact of a person claiming or branding himself regular does not make him such. His every-day work will determine whether or not he is an up-to-date, all-around physician. I claim to be a physician in the broadest sense of the word. No school or set of men has any strings on me. Truth is truth, and I accept it wherever I find it.

My file of journals is quite large, and I have in my library the works of the representative men of our day.

I might write much more, but I have already written more than I intended. I should certainly like to see the State Medical Society come out and stand on a broad plane, willing to accept for membership liberal physicians, irrespective of schools. Sincerely yours, J. O. HOFFMAN.

Orleans, Neb., October 14, 1897.

Society Proceedings.

THE winter's work of the local medical societies has now begun, and the officers of each society strive to make the meetings interesting as well as instructive. One of the great drawbacks in society meetings is the long-winded papers presented. The majority of essayists seem to think that the longer the paper the more learning it shows. Alas, but this is not so. Short and to the point should be the motto. If those called upon to write would only think this way, the hard work connected with getting up a paper would vanish. A symposium on a given subject,—three or four short papers by different men, a discussion following after the papers are read, makes the meeting profitable for all and a hardship for none. Promptness in calling the meeting to order, rigidly limiting the time occupied by the reader of the paper, and promptly calling time on those discussing, will keep away that feeling of weariness which is so likely to follow when things are allowed to drag along without let or hindrance.

THE Cedar County (Iowa) Medical Society at its meeting held in Independence, October 13, elected the following officers: President, Dr. D. W. Krouse, Waterloo; vice president, Dr. L. M. Shane, Winthrop; secretary, Dr. W. B. Small, Waterloo.

THE Custer County Medical Society will hold its next meeting Tuesday, November 16, at Broken Bow. Papers will be read by the president, Dr. A. L. Matthews, of Callaway; Dr. J. E. Summers, Jr., Omaha; Dr. G. H. Simmons, Lincoln; Dr. Chas. L. Mullins, Broken Bow; Dr. W. E. Talbot, Broken Bow; Dr. E. A. Hanna, Ansley, and Dr. H. R. Palmer, Litchfield.

THE York County Medical Society met at York on November 2 and was an interesting meeting. Dr. W. D. Jones, of Rising City, read an excellent paper on "Cholecystostomy by an Improved Technique." Dr. Plumb, of Fairmont, also had a good paper on "Ear Diseases Following Naso-Pharyngeal Disease." At the next meeting—first Tuesday in February—Dr. Jones proposes to demonstrate his technique of cholecystostomy on a dog.

THE American Academy of Railway Surgeons met in Chicago October 7 and 8. Among the papers read were "Traumatism of the Abdominal Cavity," by Dr. J. P. Lord, of Omaha; "Methods of Surgical Sterilization," by Dr. E. Boeckman, St. Paul, Minn.; "Results of Interference in Old Head Injuries," by Dr. J. W. Perkins, Kansas City. The officers elected are as follows: President, Dr. R. Harvey Reed, Columbus, O.; first vice president, Dr. W. J. Mayo, Rochester, Minn.; second vice president, Dr. Arthur D. Bevan, Chicago; secretary, Dr. C. D. Bryant, Omaha; treasurer, Dr. C. B. Kibler, Corry, Pa. Place of meeting, Chicago, 1898.

WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

The seventh annual convention of this association will be held at Denver, Colo., December 28 and 29, 1897. Papers from leading surgeons of the west have already been placed in the secretary's hands. Surgeons and gynecologists and all interested in the progress of these specialties are cordially invited to join us and add to the interest of the meeting. The local committee at Denver are active in preparing for our comfort and nothing will be left undone to make this meeting one of universal interest to all attending.

Digitized by Google

Titles to papers must be in the hands of the secretary before November 15 to insure a place on the program.

HERMAN E. PEARSE, M. D., Secretary,
1018 East 15th St., Kansas City, Mo.
JOSEPH EASTMAN, M. D., President,
Indianapolis, Ind.

UTAH STATE MEDICAL SOCIETY.

The third annual meeting of this society was held in Salt Lake City October 8, and was the most successful and interesting of any heretofore held. Some of the papers read were: "Perpetual Insanity," by Dr. M. H. Hardy, of Provo; "Classification and Pathology of Bright's Disease," by Dr. J. S. Gordon, of Ogden; "Urinalysis and Treatment of Bright's Disease," Dr. R. S. Joyce, of Ogden; "Some Obscure Affections of the Orbit," Dr. Ira A. E. Lyons, of Salt Lake; "Scarlet Fever," Dr. A. S. Bower; "Nasal Reflex," Dr. W. W. Betts; "The value of Microscopic Examinations in the Diagnosis of Diseases," Dr. P. S. Keough; "Some Interesting cases," Dr. E. Viko, Park City (see p. 339). On the subject of pulmonary tuberculosis, its "Etiology, Symptoms, and Pathology" were discussed by Dr. E. V. Silver; "Diagnosis" by Dr. A. J. Hosmer; "Treatment," by Dr. G. H. Penrose. These papers appear in this number of the REVIEW. Dr. Charles P. Hough read a paper on "Treatment of Some Special Fractures." The officers elected are: Dr. Salathiel Ewing, of Salt Lake, president; Dr. O. C. Ormsby, of Logan, first vice president; Dr. F. W. Taylor, of Provo, second vice president; Dr. C. M. Wilson, of Park City, treasurer; Dr. George H. Penrose, of Salt Lake City, secretary; board of censors, Drs. R. W. Fisher and C. F. Wilcox, of Salt Lake; Dr. R. S. Joyce, of Ogden; Dr. W. R. Pike, of Provo, and Dr. E. Viko, of Park City. A banquet closed the meeting, the toasts being "The Specialist," Dr. S. L. Brick; "Country Practice," Dr. S. A. Allen; "Our Hospitals," Dr. F. A. Meacham; "Clinical Teachings," Dr. A. S. Bower; "Our State Society," Dr. P. E. Jones; and "Medical Colleges," by Dr. C. M. Wilson.

OMAHA MEDICAL SOCIETY.

The Omaha Medical Society held its regular fortnightly meeting on the 9th inst. The meeting was well attended and full of interest. Commencing at 8 o'clock it lasted till half past eleven, and no one seemed to get wearied. Dr. J. P. Lord gave a talk on the value of conservatism in foot amputations. He illustrated his talk by showing two cases upon whom he had operated—one having been done three years ago, and the other quite recently. He showed also by photograph the result of conservative foot amputations in other cases on which he had operated. Dr. Lord's plea was for saving as much of the solid structure of the foot as possible. Much good can be done in these cases by skin grafting, often allowing the saving of considerable of the foot which would have to be sacrificed if the solid structure were removed sufficiently to allow the coaptation of the skin flaps. The discussion following showed that the members agreed in the main with the views of the speaker.

Dr. W. Ross Martin spoke on the treatment of talipes. He exhibited a patient on whom he had operated, and also plaster casts of the feet before and after operating. Quite a discussion followed. Dr. Neville took the ground that tenotomy, or operative procedures, was not justifiable in children under ten or twelve years of age. This view, however, did not seem to be held by others. Dr. Lee quoted Sayre as saying in reply to a question as to how early one could operate that the time to operate on a club foot was at the completion of the third stage of labor—that is, at the birth of the child. The case exhibited by Dr. Martin certainly showed the good management it had received, and the almost perfect result of the treatment.

Dr. Somers read an excellent paper on puerperal eclampsia, giving his experience in its management, and especially reporting a recent case which resulted fatally. A long, but at the same time an interesting, discussion followed the reading of Dr. Somers' paper. This discussion, however, showed that there is no unanimity in the medical treatment, or in the belief as to the cause of the disease. The use of veratrum veride was highly extolled by some, but just as vehemently opposed by others. Apomorphia was recommended by some and its use opposed by others. The use of large doses of morphia likewise. Venesection was unanimously advised in all casees where there was full, bounding pulse, and many advised its use in every case, without regard to condition of patient. Substitute the removed blood with normal salt solution by intravenous injection. Emptying the uterus was advised by all when labor had commenced, and one or two advised this even if labor had not begun.

Dr. Swartzlander read a paper on tabes dorsalis, which was well prepared and which was listened to with interest, but the lateness of the hour prevented much discussion.

Book Notices.

A MANUAL OF MEDICAL JURISPRUDENCE. By Alfred S. Taylor, M. D., Lecturer on Medical Jurisprudence and Chemistry in Guy's Hospital, London. New American edition of 1897 from the twelfth English edition. Thoroughly revised by Clark Bell, Esq., of the New York Bar. In one octavo volume of 831 pages, with 54 engravings and 8 full-page plates. Cloth, $4.50; leather, $5.50. Lea Brothers & Co., Publishers, Philadelphia and New York, 1897.

This work comes to the medical and legal professions at an opportune time. The past decade has witnessed the advent of many books, too many in fact, in almost all branches of the medical science. The development of the science and art of bacteriological investigation, with the consequent change of opinion upon pathology and therapeutics, has during this period overshadowed all other fields of investigation and crowded from the press all other subjects.

Under the editorship of this distinguished specialist in medico-legal investigations, this old work has taken new life and become modern in every particular. To the special student of medico-legal questions it will appear as an old friend in new dress. To the general

Digitized by Google

practitioner of either medicine or law it will be found to be an unfailing supply of information upon every possible phase of medico-legal questions. The work consists of sixty-nine chapters, arranged under suitable heads and subheads, with numerous citations of cases in the body of the pages. This arrangement is much more satisfactory to the reader than the usual foot-notes. The work is provided with a very complete general index. A special feature of great use to the student who wishes to make an exhaustive investigation of any special subject treated in the work is an index of cases cited. The English and American cases are cited under separate heads. This feature alone makes the book a very useful one to the medico-legal specialist as a time-saver in the preparation of briefs.

The statement is made and backed by supreme court decisions that an expert witness cannot be compelled to give an opinion as an expert without suitable compensation. Neither can he be punished for contempt upon refusal to do so. A little more firmness on the part of medical witnesses in the courts of this state would correct a bad practice wherein medical men are called into court and compelled to spend a day or a week of valuable time, and all for constable fees.

A new feature is a chapter on medico-legal surgery, and for the first time "railway" surgery is recognized as a specialty in legal medicine.

The entire work is of interest to all physicians who may at any time be called into court or asked to give an opinion upon some medico-legal subject. To attorneys it would be a most valuable aid for ready reference during the progress of a trial wherein the issues are made upon some point of legal medicine.

A PRACTICAL TREATISE ON SEXUAL DISORDERS OF THE MALE AND FEMALE. By Robert W. Taylor, M. D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. In one handsome octavo volume of 448 pages, with 73 illustrations and 8 plates in color and monochrome. Cloth, $3, net. Lea Brothers & Co., New York and Philadelphia.

It is so generally acknowledged that the proper regulation of the sexual function in both sexes is essential to the general well-being that it is surprising that deeper study has not been devoted to the scientific investigation of this department of practice. The aim of the author of this volume has been to portray the various forms of sexual disorders on the basis of the advanced knowledge of the anatomy, physiology, and pathology of the sexual system. Such subjects as varicocele, sexual neurasthenia, conjugal onanism, priapism, sexual erethism, and sexual perversion are all discussed in a concise manner but thoroughly, and scientifically. The chapter on sterility in the female is an excellent one, and this subject is handled in an able manner. The author is not so sure that sterility results from high conditions of civilization and the luxurious and indolent modes of life of a certain class. He questions whether these married people do not shrink from the cares incident to parturition and childhood, and whether they do not take measures to prevent pregnancy. Though no direct pathological reason can be assigned for it, the author thinks that it is established beyond a doubt that prolonged intermarriage of blood relatives tends in the end to produce at least a relative sterility, and that it certainly does give rise to inferior grades of human offspring.

Other causes of sterility are thoroughly discussed. The description of the various vaginal and vulvar lesions is given fully and with a view of placing this so little understood subject upon a clear and scientific basis. The chapter on the pathology of the diseases of the prostate, the influence of these diseases upon sexual life is well worth reading, and is very valuable. The author views the subject of masturbation through blue glasses, and believes that more disorders result from this vile habit than is generally believed. His views on this subject will not be in accord with many of his readers who have given thought to this subject.

Altogether the work is complete and of value, not only to the genito-urinary specialist, but to the surgeon and general practitioner. It is well illustrated, well gotten up, and will be a valuable addition to the library of the physician.

Board of Health Proceedings.

NEBRASKA STATE BOARD OF HEALTH.

MEMBERS—Dr. C. F. Stewart, Auburn, President; Dr. B. F. Crummer, Omaha, Vice President; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.

THE Nebraska State Board of Health, at its meeting held November 4, granted certificates to the following:

C. M. Carr (R.), Linwood,
Hospital College of Medicine, Louisville, Ky., 1897.

Edw. T. Twining (R.), Omaha,
Chicago Medical College, 1867.

Chas. E. Finch (E.), Maywood,
New York Eclectic Medical College, 1881.

Mabel Dunn (R.), Nebraska City,
Woman's Medical College, Chicago, 1896.

Frank Earl Gordon (E.), Charleston,
Cotner Medical College, 1897. (Granted under protest.)

Lyman P. Walters (R.), Nebraska City,
Starling Medical College, Columbus, O., 1881.

Geo. W. Rosenthal (R.), Omaha,
Baltimore University School of Medicine, 1897.

W. H. Parsons (H.), Omaha,
Hahnemann Medical College, 1871.

S. Alexander (R.), Beatrice,
Chicago Medical College, 1869.

G. B. Ira (R.), Lynch,
St. Louis College of Physicians and Surgeons, 1897.

E. Schneller (E.), Bruning,
American Medical College, 1889.

Henry R. Burner (E.),
Eclectic College of Pennsylvania, Philadelphia, 1870.

Geo. O. Heath, Daykin; J. C. Minor, Omaha; W. D. Rea, Omaha; L. A. Rupert, Omaha, held for investigation.

Digitized by Google

WESTERN

MEDICAL REVIEW.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

PUBLISHED BY THE WESTERN MEDICAL REVIEW CO., LINCOLN, NEBRASKA.

VOL II. No. 12. DECEMBER 15, 1897.

Original Articles.

THE ANTITOXIN TREATMENT OF DIPHTHERIA.*

BY W. D. JONES, M. D.,

RISING CITY, NEB.

In any discussion as to the value of a therapeutic method the principles upon which it depends must be kept clearly in mind.

Serum therapy, says Behring, is that by means of which we endeavor to combat those infectious diseases which we know are caused by the poisons of micro-parasites. So far, antitoxins have been found only in the blood of animals immunized by a specific toxin injected artificially, or naturally by the developmental process of a micro-organism with which it has been infected. Just what antitoxin is we do not know, farther than it is a soluble proteid substance and renders the toxin inert and exerts an inhibitory effect upon the microparasites from which it is indirectly derived. Therefore, antitoxin exerts a curative and protective action against the specific disease-product corresponding to it. When the subject of an infection survives, the amount of antitoxin produced is more than sufficient to neutralize the toxin and inhibit the growth of the micro-organism producing it. This surplus of antitoxin is found in the blood serum and can be utilized to aid other individuals to overcome the same infection. Upon this point—the excess of antitoxin in the blood serum—rests blood serum therapy. The success of serum therapy is probably in direct ratio to the tendency of the infection remaining localized.

As diphtheria is of purely local origin, it is perhaps more amenable to this form of treatment than any of the infectious diseases. In this connection the experiments of Ehrlich with ricin and abrin are very interesting and instructive. This investigator has shown that animals can tolerate gradually increasing doses of these alkaloids, provided that the increase of dosage up to a certain point is very small. When this point is passed the increase can be very rapid without any deleterious effect upon the animal, as the drug is not only simply tolerated, but simultaneously neutralized. These experiments of Ehrlich threw much light upon the work of Behring, Wernike, and Kitasato, who experimented with the toxins of diphtheria and tetanus, and showed that in the blood of animals accustomed to these poisons a new substance—antitoxin—was produced. This substance was not, according to Brieger, found in the blood of normal animals. Regarding the toxin, or the resultant product in the developmental process of the diphtheria bacillus, it is not generally considered a true septicemia, primarily, but strictly a toxemia, though a septicemia may develop as a subsequent complication.

What is the effect of this toxin upon the organism? In cases not dying early we find hemorrhages into various viscera, cardiac, hepatic, and renal thrombi, cellular degeneration of the lymph nodes, spleen, liver, kidneys, and heart muscle, with toxic neuritis of the peripheral nerves and cells in the anterior horns of the cord. The blood has been examined by Ewing, Morse, and Billings relative to the effects of diphtheria toxin and antitoxin. The conclusions reached by Billings after the study of thirty-six cases of diphtheria and the effects of antitoxin upon fifteen healthy individuals are as follows: (1.) The red corpuscles undergo a decrease in number; regeneration is slow. (2.) The leucocytes are increased in all cases except the mild and very severe. (3.) The percentage of hemoglobin falls coincidentally with the number of red corpuscles, but regenerates much more slowly. (4.) The diminution in the number of red corpuscles and the percentage of hemoglobin is much less in cases treated with antitoxin. Leucocytosis is not affected. (5.) Antitoxin treatment of diphtheria has no deleterious effect upon the red blood corpuscles. Otherwise it seems to prevent degenerative changes. These statements are in accord with the views of McFarland, who says: "An antitoxin is a neutralizing or annulling agent, not a regenerating one, and therefore in therapeutics finds its proper sphere only in the beginning of the disease combated. Up to a certain point the symptoms of diphtheria and tetanus are due to the circulation of toxins in the blood, and can be successfully combated by antitoxic neutralization. Later in both diseases we have symptoms resulting from the disorganization of the nervous system, degeneration of the heart muscle, destruction of the kidneys, etc., and the neutralization of the poison can be of no avail because the lesions are irreparable, and the patient must succumb."

Now we believe the conscientious and intelligent physician will apply the remedy which will give most speedy relief from suffering and at the same time most rapidly check a pathological process with the minimum of danger to the patient. We are positive that in the antitoxin treatment of diphtheria we have a remedy that fulfills these requirements, as is daily being demonstrated clinically.

We do not question but there are some honest doubters; but prejudice is also rife; prejudice too often born of ignorance—a child of apathy and disinterested laziness. It is very true the mistakes of great men have

* Presented to the Lincoln Medical Society, October 14, 1897.

Digitized by Google

taught us to be cautious; but is not caution too often made the scape-goat for dangerous conservatism? All theories not supported by the results of practical demonstration should be accepted with great prudence, as there are a few would-be epoch makers in medicine whose investigations have never extended beyond the pales of the chemical or physiological laboratory; but fortunately their theories soon fade away before the search lights of clinical facts. Intelligent and careful investigators on every part of the globe are engaged in daily research, and with them our leading medical journals are in constant communication and weekly disseminating knowledge and keeping the ranks of the profession posted and in touch with the latest facts and theories of the day—facts and theories that are being day by day demonstrated clinically. Still there are those who stand aloof and decry a remedy or system of treatment the efficacy of which time and clinical research have established beyond the possibility of a doubt. Antitoxin as a therapeutic agent has been before the profession since 1890, when Behring communicated to the Hygienic Institute at Berlin its effects in rendering animals immune to diphtheria. Again, in 1891, at London, Behring read a paper before the International Congress of Hygiene detailing his methods and results. Since the inauguration of the serum treatment of diphtheria in the Kaiser und Kaiserin Fredrich Kinderkrankhaus, at Berlin, the director, Professor Baginsky, says: "Our mortality has been reduced from forty-one and eight-tenths to thirteen and two-tenths per cent. We have never had such a low mortality with our mildest epidemics and our best form of treatment." And this from so high an authority, and in 1894, before the serum treatment had attained the high grade of efficacy of to-day as well as the freedom from danger it likewise enjoys.

About three years ago Dr. Louis Fischer, of New York, went to Europe to make a thorough study of the antitoxin treatment of diphtheria. So impressed was he with the results of the treatment that he at once became an enthusiastic advocate of its employment; and to his untiring efforts and early clinical reports is largely due the increasing and deserved popularity of the remedy to-day. The committee of the American Pediatric Society, appointed to collect statistics of the use of antitoxin in private practice, received reports from six hundred physicians in the United States and Canada. In this report were excluded all doubtful cases that recovered, and included all doubtful cases that died. In all, 5,974 cases were reported with a general mortality of 12.3 per cent.; excluding moribund cases, or those dying within twenty-four hours after receiving the injection, it was 8.8 per cent.; 4,120 injected in the first three days of the disease gave a mortality of 4.8 per cent., excluding the moribund cases at the time of injection.

"The most convincing argument, and to the minds of the committee an absolutely unanswerable one, in favor of serum therapy is found in the results obtained in the 1,256 laryngeal cases." One-half of these recovered without operation. Of the 530 intubated the mortality was 25.9 per cent. Compare these results with those obtained in laryngeal cases during preantitoxin days. "The latest intubation statistics are those compiled by Dr. Dillon Brown, who in the month of November, 1888, collected 3,372 cases from 159 operators, with 646 recoveries, or 27.2 per cent." (Billington and Odyer, page 297, first edition.)

Slow indeed has the profession been generally in accepting antitoxin as a reliable therapeutic agent. The average mortality in all German cities per 100,000 during the nine years from 1886 to 1895 was 106. During 1894 there was a moderate reduction in mortality, followed in 1895 by a decided reduction in mortality when antitoxin was generally used in German cities. "The Pasteur Institute in Paris began the distribution of antitoxin in November, 1894. Early in 1895 arrangements were made to furnish antitoxin free to those unable to pay for it. In 108 cities of over 20,000 inhabitants, with an aggregate population of 8,150,000, the average number of deaths from diphtheria during the first six months of the seven years, 1888 to 1895, was 2,627. In the first six months of 1895 the absolute mortality from diphtheria in the same 108 cities was only 904, or a diminution at the rate of 65.6 per cent. The rate of diminution, month by month, went on almost uniformly from one of 56.2 per cent. for the month of January to 75 per cent. for the month of June. The use of antitoxin began in Paris and Berlin in 1894, and was general in 1895. In 1895 antitoxin was introduced by the health department of New York and is now pretty generally used." Dr. Biggs, of the New York health department, has furnished us with some very interesting tables giving the mortality of cases treated with and without antitoxin, according to age, day on which treatment was commenced, as well as some on the results of immunization.

Cases Treated with Antitoxin, according to Age.

Age.	Cases.	Deaths.	Mortality—Per cent.
0 to 2 years.....	1.494	469	31.4
2 to 5 years.....	3,678	762	20.7
5 to 10 years.....	3,184	473	14.8
Over 10 years....	1,444	99	6.9

Comparing these results with those obtained previously without antitoxin, we have the following table:

Herz. Mortality—Per cent.		Hirsch. Mortality—Per cent.		Bogaisky. Mortality—Per cent.	
0 to 1 year.....	80	0 to 1 year.....	88.3	0 to 2 years....	63.3
1 to 3 years.....	45	1 to 3 years....	82.5	2 to 4 years....	52.8
3 to 5 years.....	40	3 to 4 years....	63.9	4 to 6 years....	37.9
5 to 10 years.....	17	4 to 5 years....	46.9	6 to 10 years...	24.6
Over 10 years.....	17	6 to 7 years....	43.2	10 to 15 years..	14.6
		Over 7 years...	22.2		

Mortality of Cases Treated with Antitoxin, arranged according to the Day of Disease.

	Cases.	Deaths.	Mortality—Per cent.
First day of disease.....	1,415	51	3.5
Second day of disease	2,640	218	8.0
Third day of disease.....	2,340	300	12.8
Fourth day of disease.....	1,458	346	23.6
Fifth day of disease and after	1,912	671	35.0
Totals.....	9,765	1,581	16.1

Digitized by Google

According to this table it is apparent that to obtain the best results the treatment should be commenced as early in the disease as possible.

Immunization by Antitoxin.

No. of cases immunized.	No. of antitoxin units used.	No. of those immunized attacked after 30 days.	No. attacked after 30 days.
17,516	50–1000 average 150–200	109 mild 1 fatal	20 mild. 1 fatal.

My experience in the use of antitoxin in the treatment of over sixty cases during a recent epidemic of diphtheria has afforded me an opportunity to pretty thoroughly test its merits and arrive at some very positive conclusions.

The following cases are of interest:

CASE I.—M. K., German girl, age 5, came under observation accidentally while I was attending another member of the family for a different disease. She had had a sore throat for five or six days when first seen, and presented a decidedly hopeless appearance; temperature 104°; pulse 130; skin of ashy pale color; nostrils occluded with a dirty gray membrane; tonsils, uvula, and pillars covered with the same; urine scanty, albuminous. Child treated with Loeffler's solution every three hours and 1-60 grain strychnine with iron given at like intervals. Having no antitoxin at hand, some was ordered and 1,000 unit dose given forty-eight hours after first seeing the case, fully a week after the inception of the disease. The following morning the temperature had declined to 100° and the pulse to 110, with a marked improvement in the child's appearance. Forty-eight hours after receiving the antitoxin the throat and nose were clean, but child gradually failed and died six days after receiving the antitoxin.

CASE II.—L. K., age 8, of the same family, was romping about the yard on Monday. Parents refused to have the child immunized against diphtheria, preferring to treat her after the manner recommended by a friend. At this turn of affairs I retired, telling the people I would return when they sent for me and were willing for me to take full control, as I could not assume any responsibility if they treated the case. On Wednesday evening I was hastily summoned and found this very child dying from a most virulent form of diphtheria. Death relieved the little sufferer an hour after my arrival. Two other children of the family contracted the disease, were treated with antitoxin, and recovered, while still two others received immunizing doses and never contracted the disease. The results in this family were very encouraging to me, as they were obtained under very unfavorable circumstances. House was small, filthy, and very poorly ventilated, and, at times, the well slept in the same room with the sick.

CASE III.—M. L., aged 11, delicate, anemic child, had had the disease one week when I saw her; skin was pale and of a leaden hue; temperature 103° and pulse 140 and weak; marked infiltration of tissues about the neck, completely obliterating the natural landmarks; breathing somewhat embarrassed, but not alarmingly so. Thin, ichorous discharge from mouth and nose. Inspection of the throat was made with some difficulty on account of pain caused in attempting to open the mouth. Post-pharyngeal wall, pillars, tonsils, uvula, and soft palate covered with a dirty gray leathery deposit which left a breathing space the size of one's little finger. Nostrils were completely occluded. This was a typically grave case of diphtheria complicated with scanty and albuminous urine. Gave 2,000 units of antitoxin, iron, strychnine, and stimulants. To my surprise the child was improved on the following day, and on the next day the throat and nose had cleaned and temperature had dropped to normal, with a pulse of 120, improved in volume, and the child sitting in a half reclining position in a chair. Urine had increased in volume, but was still albuminous. Strychnine and iron continued and family cautioned to keep the child quiet, as she was far from well, but one day being very warm and inviting, she was permitted to visit another family of little ones in the same yard, about fifty yards distant. She returned home in about an hour, sat down in a chair, and suddenly died. This was the fourth day after receiving the antitoxin.

CASE IV.—Mrs. L., aged 38, mother of the above child, acquired the disease a few days following the death of the child; seen twenty-four hours after inception of disease; pulse 120, with temperature 103°; right tonsil and anterior pillar of same side covered with typical pseudo-membrane of diphtheria, with beginning involvement of the left. Gave 1,000 antitoxin units. Membrane completely exfoliated in thirty-six hours. No albumin or casts in urine. Complete recovery in three days. Another child was given a 500-unit immunizing dose, but never contracted the disease, yet sleeping and eating in the same room.

CASES V and VI.—M. S. and P. S., aged, respectively, 11 and 7, of same family, were seen, according to report, on the third day of the disease. Both tonsils and anterior pillars of each fairly well covered with dirty gray pseudo-membrane, emitting a characteristic sickening odor. Each was given a 500-unit dose of antitoxin. P. S. recovered promptly, the membrane exfoliating completely in thirty-six hours. M. S. required a second injection of 500 units in thirty-six hours, after which she recovered slowly. This child was weak and listless from the first, with almost complete anorexia and frequent vomiting. Urine was reduced in quantity and contained some albumin when first seen. Optic neuritis developed as a sequel to the case of P. S.

Mabel S. and D. S., of same family as the above, received 250-unit immunizing doses at time their sisters were treated. Mabel acquired the disease in a mild form just one week following the prophylactic dose. This yielded promptly to a 500-unit injection. D. S. did not acquire the disease.

CASE VIII.—B. C., aged 11, was seen on Monday a few hours after the nature of the trouble was discovered. Treated with Loffler's solution every three hours and iron and strychnine exhibited. Temperature was 102°, with pulse of 130, and so continued, while the membrane gradually increased in size until

Digitized by Google

Wednesday, when a 500-unit dose was given. Membrane peeled off in thirty-six hours; recovery was prompt; no albumin found in urine before or after injection. Her sister, aged 15, who was her constant attendant, was given 250-unit immunizing dose and never contracted the disease.

CASE IX.—M. J., age 8, was taken severely ill during the night and was seen by me the following morning. Pulse 130 and temperature 103°, with a well-marked case of faucial diphtheria. Five hundred-unit dose of antitoxin was given. Throat clean in thirty-six hours. Pulse and temperature normal. Three little brothers in the family, ranging in age from 18 months to 6 years, had all been exposed, one having slept with his sister the night of her first illness. All were given an immunizing dose of serum and escaped the disease.

CASE X.—S. S., age 4, acquired typical case of faucial diphtheria and was given 600-unit dose of antitoxin. Membrane rapidly disappeared, but the injection was followed in one week by an erythema, with a temperature of 102°, which disappeared in a few days. Repeated examinations in this case failed to disclose anything abnormal in the urine more than a slight excess of urates. Three other children in the family were immunized and never contracted the disease.

CASE XI.—Baby A., age four weeks; pale and restless; high fever and rapid pulse; no lung or bowel trouble; one nostril free, the other occluded by a grayish deposit; throat clean and practically normal in appearance. Family had had diphtheria in the house quite recently. Slide was prepared from secretion of the occluded nostril and the typical bacillus demonstrated. Baby given a 500-unit injection of serum. Within forty-eight hours a slug of pseudo-membrane 8 mm. by 3 cm., was discharged from nostril; an uneventful recovery.

CASE XII, with a moral.—Had just returned from a visit to a patient suffering from diphtheria and was hastily called to a case of labor; after scrubbing and disinfecting hands and arms as thoroughly as time and circumstances would permit, I removed an adherent placenta. Within twenty-four hours following the labor woman had a slight chill and temperature of 103°, that was little if at all modified by repeated antiseptic intrauterine douches. Some flakes of the little debris washed away by irrigation aroused my suspicion that this was not an ordinary case of infection. Preparing a slide from a small piece of debris, I was able to demonstrate the Loeffler bacillus after a long and tiresome search. No streptococci or staphylococci were present. One thousand units of antitoxin were given that evening and temperature dropped to normal the next day and so remained. Recovery prompt and uneventful without any further treatment, except an occasional vaginal douche. Don't go direct from a diphtheritic to a labor case; better not go at all.

In all I have treated seventy-one cases of diphtheria with antitoxin, with two deaths, or a mortality of 2.8 per cent. In many of the cases treated as careful a bacteriological examination was made as my resources would permit, and in only one case did I fail to find the typical Loeffler bacillus, and this was in a case from which a swab was taken immediately following a gargle of hydrogendioxide. No culture was made. Two cases had a recurrence in six weeks after being cured by the serum. Some cases of a few days' duration furnished examples of mixed infection. The streptococcus was the germ generally found. Cases of over three days' duration were generally cases of mixed infection. In these cases albumin was generally present in the urine. In about 15 per cent. of cases treated no albumin was found in urine of those that came under observation during the first twenty-four hours. The administration of antitoxin did not increase the tendency to albumin, as demonstrated by analyses of twelve unselected cases to which were given from 250 to 500 immunizing units. In not one of these cases did I discover albumin or casts. The charge against antitoxin, that it causes diffuse nephritis with albuminuria, I believe to be absolutely false and without foundation. Kahlden has made some conclusive studies relative to the effects of antitoxin upon the hearts and kidneys in rabbits and guinea pigs injected with very large amounts of serum; these organs were found entirely normal upon post-mortem examination. In the case of diphtheria treated with antitoxin, I was able to demonstrate albumin in the urine in varying amounts, but only in cases that had been in progress twenty-four hours or more, and then the amount of albumin found was proportionate to the severity of the attack and its duration without treatment. Among the seventy-one cases treated were three of laryngeal type, all recovering.

In concluding an elaborate article in the Medical News of December, 1896, on antitoxin serum, Dr. Biggs, of the New York health department, says: "We desire to bring out strongly and clearly the fact that it matters not from what point of view the subject is regarded, if the evidence now at command is properly weighed, but one conclusion is or can be reached, whether we consider percentage of mortality from diphtheria and croup in cities as a whole, or in hospitals, or in private practice, or whether we take the absolute mortality for all the cities of Germany whose population is over 15,000, and all the cities of France whose population is over 20,000, or the absolute mortality of New York city, or for the great hospitals in France, Germany, and Austria, or whether we consider only the most fatal cases of diphtheria—the laryngeal and operative cases, or whether we study the question with relation to the day of the disease on which treatment is commenced, or the age of the patient treated,—it matters not how the subject is regarded, or how it is turned for the purpose of comparison with previous results, the conclusion reached is always the same, namely, there has been an average reduction of mortality from the use of antitoxin in the treatment of diphtheria of not less than 50 per cent., and under the most favorable conditions a reduction of one-quarter, or even less, of the previous death rate."

This has occurred not in one city at one particular time, but in many cities, in different countries, at different seasons of the year, and always in conjunction with the introduction of antitoxic serum, and proportionate to the extent of its use.

Digitized by Google

Then, finally, there is to be added not only the experimental proof of the specific action of antitoxin in neutralizing the toxin of diphtheria, but also the overwhelming mass of evidence from the personal observations of the most distinguished practitioners of medicine of every country. There are to-day in the whole civilized world not more than three or four active opponents of the antitoxin treatment of diphtheria whose names were known to the medical profession before the introduction of antitoxin. It is well to have in mind the fact that what is called conservatism in medicine is only a cloak assumed to cover up indolence. The acceptance of a new principle, or a new fact, involves the expenditure of a certain amount of mental energy. Old ideas and conceptions must be discarded or readjusted to the new information acquired. This involves labor and effort, which some are not willing to expend. They are not willing to be governed by the data at hand and form conclusions for themselves, but shake their heads wisely, predict a reaction, and plead for conservatism. It is not possible now for any unprejudiced person to master the evidence available regarding the value of antitoxin in the treatment of diphtheria and reach anything but a positive conclusion.

The value of antitoxin in diphtheria is no longer a question of opinion or theory, but an established fact. The few who oppose it have proved nothing in comparison with the enormous mass of evidence as to its specific value. It may, therefore, be affirmed that the following facts have been demonstrated:

1. That diphtheria antitoxin, where generally employed, has reduced the mortality from diphtheria at least one-half.

2. That it has distinctly favorable effects on the clinical course of the disease, shortening it and lessening its severity.

3. That the earlier the treatment is commenced the better the results obtained; the mortality, when adequate doses of antitoxin have been given within the first forty-eight hours of the disease, not exceeding 5 per cent.

4. That antitoxin is a specific against true diphtheria, and less efficacious in mixed infection, but even in these forms of diphtheria is a decided benefit.

5. That it is not necessary to wait for a confirmatory bacteriological diagnosis, but that in every clinically suspicious case of membranous angina, especially in children, a medium dose of antitoxin should immediately be given and repeated if required by the further development of the case.

6. That antitoxin is a remedy without serious after effects in the doses which have ordinarily been employed; that it has no injurious action on the kidneys, the heart, or the nervous system; that it does not entirely prevent albuminuria, heart failure, and post-diphtheritic paralysis, because the effects of the diphtheritic toxin which has already entered the system before the administration of the remedy, no matter how soon the treatment is begun, are not always completely counteracted by the antitoxin.

7. That the protection conferred by immunizing doses of antitoxin is almost absolute for a short period of time.

8. Antitoxin should begin in early or mild cases in not less than 500-unit doses; for moderately severe or recent laryngeal cases in not less than 1,000-unit doses; and in severe faucial or laryngeal cases in not less than 1,500-unit doses.

If, in the face of the volume of statistics and testimony in favor of the antitoxin treatment of diphtheria, I hear a physician oppose or condemn it, I conclude that he either knows nothing about its use practically, or his experience has been very limited and with an inferior product; or perhaps he has treated the case until all other means have failed, hopeless degeneration of important organs has taken place, when as a last resort he expects antitoxin to accomplish the impossible. Under these circumstances the remedy is not employed scientifically or honestly, and should reflect discredit upon the physician and not the remedy.

In the late administration of antitoxin you merely stop the storm waged against the frail bark of life, as irreparable degeneration has taken place, and it sinks beneath the silent wave of toxemia.

ABORTION AND ITS TREATMENT.*

By A. E. SCOFIELD, M. D.

TILDEN, NEB.

Grandin says fully 50 per cent. of pelvic diseases of women can be traced to improperly treated abortions, and Wm. Poke says abortions are the most common cause of disease of the appendages. The causes of abortion are many, and may be local or constitutional. Under the latter head may be mentioned syphilis, of which we country practitioners see but little, anemia, and the long list of infectious diseases in which high temperature plays such an important role. Of the local causes I would mention marked lacerations of the cervix, endometritis, retro-misplacements, and the uterus being bound down by adhesions (the result of old inflammatory exudations) as the most common causes. With these local abnormalities we may have many times a highly sensitive nervous system, wrought to a very high tension by the pregnant state, which greatly increases the danger of abortion. However, the largest number and most serious cases are those induced by mechanical means and usually by the patient herself. With this class of cases the physician is most often consulted at a late hour, with the fluid drained off, the patient greatly weakened by hemorrhages, and with a local and often a general sepsis.

In threatened abortions local causes should be searched for and appropriate treatment instituted. Where a patient is of unstable nervous system and is easily fatigued and irritated, causing perceptible pain in the back, she should be kept quiet, bowels and diet regulated, and some nerve and uterine sedative given. Asafetida here does good, as also does viburnum. Sometimes seemingly inevitable cases may be prevented, but where pain in the back has been severe,

* Read before the Elkhorn Valley Medical Society, Norfolk, Neb., October 5, 1897.

Digitized by Google

with hemorrhage and a dilated os, even though the membranes have not ruptured, the uterus will most likely empty itself, but if we haven't sufficient reason for knowing it will do so, every means should be taken to prevent it. Patient should be put to bed and absolute quiet enjoined. Opium here in some form is a most reliable remedy and should be given in full doses.

When abortion comes on from natural causes the fetus probably has been dead a few days, the membranes are intact and you do not fear severe and depleting hemorrhages, delay in emptying the uterus is often justifiable, for very often the mass is expelled entire, involution begins at once and an uninterrupted recovery may be confidently expected.

If called to a case of threatened abortion, where pain, hemorrhage and dilatation are not marked, the expectant course on the lines laid down should be followed. Rest in bed, correcting so far as possible the existing causes, and the administration of opium to quiet. Should hemorrhage become severe and the other symptoms more marked, the vagina should be irrigated with warm antiseptic solution and packed with gauze to control hemorrhage, always bearing in mind the danger of concealed hemorrhage after the fourth month, and if you would be sure of stopping the bleeding the packing should be placed firmly around the cervix and completely filling the vagina. This serves the patient, as well as the physician, a double purpose, as she now has time to recover from the exhausting hemorrhages, the uterus is stimulated to better contractions, and the lower segments softened and dilated so mechanical dilatation, if required, is an easy matter. The packing should be removed in about twenty-four hours. Then, instead of further waiting for the uterus to expel its contents, as is too often done, we should place the woman crosswise in bed, buttocks drawn well over to edge of bed, legs flexed on thighs and held by one, or better, by two assistants. My plan is to slip a Kelly's surgical cushion under patient's buttocks. Thoroughly irrigate the vagina, introduce a speculum, catch the anterior lip of the cervix with a pair of tenaculum forceps, and bring the uterus well down, clean off the cervix uteri, and dilate the os. There will then be plenty of room for one or two fingers. Then with the finger I remove all that is possible in this way: Take a dull curette and go over the entire inner surface. If there are any tufts of placenta that cannot be separated the finger should again be used, for the finger is the most reliable and safest of instruments. It conveys to the operator's mind exactly what he is doing. There are cases, however, where nothing but a sharp curette will reach and do the work, and then I do not hesitate to use it. It is not a cutting instrument, and one can tell by the touch the toughness of the uterine tissues and consequently the amount of force that is safe to use. After all is removed I irrigate the uterine cavity with a hot antiseptic solution,—the kind of antiseptics and strengths of same depend on the circumstances (in thoroughly septic cases, bichloride, 1 to 4,000, followed by plain boiled water, is perhaps preferable). After the uterine irrigation I wipe the cavity out with iodoform gauze, and, lastly, introduce a good sized strip well up to the fundus, leaving sufficient external so it may be removed easily. This should remain from twenty-four to forty-eight hours. Although the danger of hemorrhage is now passed, a soft and flabby uterus may bleed too freely without this, and the gauze excites firm contractions and establishes the beginning of involution. Ergot is rarely needed, but I often give quinine for the same purpose, as well as for its appetizing and tonic effect.

The following case illustrates some of the peculiarities one often meets in practice:

Mrs. H., age 38, five children, no abortions. Last January she came to me with a history of severe uterine hemorrhages which had occurred every day, or every few days, for six weeks. On examination I found a deep bilateral laceration of the cervix; uterine cavity three inches deep, with a marked endometritis, but no existing pregnancy; mucosa was spongy and bled freely when curetted. After a thorough curettement I washed out the cavity and applied ichthyol to the entire inner surface, inserted a strip of iodoform gauze, and prescribed viburnum and ergot. This cured the patient and she had two normal menstrual periods. Menstruation was then absent for two months, when she began to flow irregularly again, becoming progressively worse and occurring on alternate days.

Although I did not see her at that time she appeared to have no definite symptoms of pregnancy, and from a description of her condition from her husband, I thought her former trouble had returned, with a possible malarial complication, for they lived in a low and sloughy place, and I gave her full doses of quinine for a few days. The hemorrhage still continuing, I visited her and found her much exhausted from the continued flowing and pregnant about four months. The os was dilated to admit end of index finger; the discharge was not offensive; cervix was quite unyielding; there had been no pain, and the uterus had made no attempt to rid itself of the fetus. I washed out the vagina and packed it with iodoform gauze. The next day I found that she had flowed some in spite of the gauze packing, which was removed, vagina irrigated, and cervix dilated. Then with two fingers I removed a macerated fetus and most of the placenta. The remainder was then removed with the curette, uterus washed out with very warm bichloride solution, followed by plain boiled water, and a large strip of iodoform gauze introduced, which was left for twenty-four hours, and patient was instructed to use hot water vaginal injections every day for a week. Quinine was given for its tonic effect and also for its contracting effect on the uterus. The patient made a prompt recovery.

THE peculiar sensation imparted to the finger on drawing a curette over the endometrium may give some hint as to the nature of the affection; if it is grating, it is vegetations or placental fragments; if soft and spongy, it indicates endometritis hyperplastica.—Munde.

Digitized by Google

SEPTICEMIA FROM ABORTION.*

BY ALLAN B. CHERRY, M. D.,
WINSIDE, NEB.

At the present day abortion has become so common that the physician sees its effects in his every-day practice.

We will not enter into a discussion as to the cause of this increase or how far the physician is responsible. The fact exists that women have learned how not to produce and seem determined to make use of the knowledge. Abortion is regarded by too many women at the present day as too trivial an occurrence to call to their aid a physician, leaving it all to nature, or worse, to some meddlesome midwife who was probably instrumental, or the direct cause, of the abortion, and through whose ignorance septic material is conveyed to her. Or leaving the products of conception closed up in utero to be the cause of more serious diseases which affect the pelvic viscera of woman than all others combined.

This form of septicemia may occur at other times, even at the termination of the pregnant state, but our ideal antiseptic midwifery has reached that point of perfection that a woman is comparatively safe. And should such a condition follow a natural labor, the physician attending would certainly deserve the censure of the profession as well as the laity.

It is different with abortion, which is an unnatural process. Statistics show that there is a certain amount of risk in every case, it matters not how strict have been our antiseptic precautions. It signifies the interposition of disease or violence and the disturbance to a greater or less degree of the equilibrium of nature's forces.

This violation of nature's law, together with the retention and decomposition of the membranes, decidua, and clots, criminal abortion with its risk of traumatism from unskilled use of all kinds of instruments, probably infection from unclean hands and unclean instruments, depressing effects from drugs, in her wasted state from loss of blood, all tend to a condition ending in a probable fatal septicemia.

Septicemia in the light of our present knowledge signifies a poisonous element floating in the circulating fluid carried to the different parts of the body, causing serious and often fatal results. It is produced principally by the absorption of decomposed products of conception retained in utero, also from poisonous material introduced from without entering the system and producing its effects upon the patient according to the virulence of the poison and her individual resistance or susceptibility to its effects.

Therefore we witness in our practice all forms and groups of this disease with different intensity.

Milder cases recover with proper treatment and attention, while with others death of a life-long suffering is the result.

It is difficult to classify or group the different forms of septicemia resulting, as in every type there would be various modifications.

We will classify them for convenience into three groups: (1) the mild, (2) the severe, (3) the uncontrollable. In all these classes we base our observations on the theory that septicemia was the disease or condition, endometritis, salpingitis, peritonitis, cellulitis, phlebitis, etc., complications resulting therefrom, and the severity of the attack and the susceptibility of the patient making the difference.

GROUP I.—In this group we include all milder cases which under favorable surroundings and intelligent care quickly end in recovery. This constitutes a large percentage of cases which are seen by the average practitioner. A sample case is the following:

CASE I.—Mrs. A., married, 36 years of age, has borne three children, no previous abortions. Aborted one week previous to my visit at about the third month of gestation. At that time she had considerable pain and hemorrhage, which lasted five or six hours, followed by clots and parts of the fetal envelopes. She seemed to get along very well. Flow stopped the third day, but upon attempting to get up flow and pain again began and continued until my visit, seven days after the abortion. Examination revealed tenderness of the abdomen and uterus and she complained of considerable pain. The os was patulous and emitted a foul smelling discharge. Pulse 100. Temperature 102°. There was an anxious facial expression and she had had pronounced chills. The treatment was very simple. With a wire curette I curetted the uterine cavity, removing all foreign material, washed the cavity with a bichloride solution, gave small doses of ergot to tone up the uterus, ordered hot vaginal injections morning and evening, and the patient made a good and quick recovery. The fever went down very rapidly after the removal of the contents of the uterus. In this case parts of the fetal envelopes and clots remained in utero.

IN GROUP II we include the more severe forms, those which have not received intelligent treatment, where surroundings are not favorable, where patient is wasted with disease or weakness from loss of blood at the time of the abortion, or from criminal operation to destroy the fetus, or in the wealthy indolent class who take no exercise, or the poor, overworked, underfed woman, in both where the individual resistance is weak and uterine contractions are feeble, lacking in force to expel clots and remnants of fetal membranes which may be enclosed. In this group some prove fatal, others recover after suffering from endometritis and salpingitis, while others, with intelligent treatment, recover after severe attacks.

CASE II.—Mrs. B., age 30, four children. She had a history of previous abortion, from which she recovered, leaving resulting pelvic induration. Aborted three weeks prior to my visit, brought on, she said, by drinking a large quantity of sage tea. She said at the time she nearly flowed to death and had flowed a great deal since. She had had severe pains in the uterus and bowels, which had gradually increased. She also had chills, followed by fever. Examination found uterus enlarged and sensitive. There was a foul smelling discharge, which looked like blood and

*Read before the Elkhorn Medical Society, Norfolk, Neb., October 5, 1897.

Digitized by Google

pus. Temperature 103° F., pulse 120 and weak. There was an anxious facial expression and a sallowness of the skin; abdomen swollen and tympanitic; tongue dry and coated with a dry brown coat, with a furred appearance; patient very much emaciated; appetite gone, and she seemed nearly bloodless. I carefully removed everything from the uterine cavity and with a wire curette scraped every part of the lining of the uterus, removing a large quantity of foul smelling, putrid material; thoroughly irrigated with hot bichloride solution, and ordered red hot vaginal injections. I gave quinine and other tonics, and rectal nourishment, as the patient for a time could not take nourishment by the stomach. In this case we had a severe edomnetritis and cellulitis, a salpingitis of the right side, and a general peritonitis. The acute period lasted over a period of three months before she was able to leave her bed, and now, after a period of over a year, is a great sufferer, a chronic salpingitis still remaining and probably will not be cured until an abdominal section is done.

CASE III is another under this group which was very interesting to me, as I was censured for the accident which followed. Mrs. C., age 36 years, two children, several abortions, all of which were brought on by herself by a catheter or some instrument. She produced an abortion at the fourth month, from which she flowed terribly, which weakened her very much. I was not called until the twelfth day after it occurred. I found the patient in about the same condition as the one just reported. It being in the first years of my practice, I called Dr. W. C. Wightman in consultation. We removed everything from the uterine cavity, giving her, as I consider, the proper care. We were very careful to leave her aseptically clean, gave her quinine and hot vaginal injections, and left her in as good condition as possible. I drove out the next morning and found her suffering from intense pain in the right leg. It was most severe at the bifurcation of the popliteal artery into the anterior and posterior tibial at the lower border of the popliteal space. This pain had come on suddenly during the previous night. The leg below the knee had a bluish white look and was cold and painful to the slightest touch. She required it elevated constantly to endure the pain. My diagnosis was embolus. As far as the septicemia and uterine trouble was concerned she made a good recovery after a period of four or five weeks, but there seemed to be no circulation in the leg below the knee. Saving the leg was despaired of and amputation talked of, but after a month it seemed to get warmer, artificial heat was not so much needed, and after a period of six months she was able to place her foot to the floor. In a year could walk with the aid of a crutch. I saw the patient for three years, and the last time I saw her she was walking with difficulty, and I hear she never perfectly regained the use of the limb.

GROUP III.—Here we find all symptoms intensified. Symptoms may begin as in group II and rapidly grow worse, or might begin suddenly and terminate the life of the patient in a few hours, before any inflammatory symptoms arise, but usually the train of complications follow, as peritonitis, cellulitis, abscess formations, etc. There would be high fever in the inflammatory forms, and there might be none in the toxic. The severity of the poison might terminate the life of the patient before inflammatory symptoms develop. There would be insomnia, violent delirium, dry tongue, and coated with a dirty brown coat, offensive breath, and severe vomiting. The treatment must be necessarily energetic from the beginning, including curetting, uterine and vaginal injections and irrigations, alcohol, nourishment, enemata, etc. Such treatment would destroy the foci of infection and recovery result, but death is the more usual result.

In conclusion I would say that I always use the curette without hesitation, and in every case but a short time elapses before that anxious facial expression is turned into one of brightness and the temperature falls to normal. After curetting I always wash out the cavity with a bichloride or peroxide of hydrogen solution.

ECTOPIC GESTATION.*

BY EWING BROWN, M.D.,
PROFESSOR GYNECOLOGY, OMAHA MEDICAL COLLEGE.

The objects in presenting this paper are on account of the comparatively small number of cases seen in general practice, the deceptive conditions often present, the symptoms pointing to this condition often poorly marked or little heeded, the gravity of the condition to the mother, and the responsibility resting on the attendant for prompt and safe relief.

It is well at times to depart from the discussion of the more frequent and general disorders and call attention to those which, on account of being met with only occasionally, are perhaps almost lost sight of, and hence not so readily recognized when they present themselves. Yet it is now known this condition is more frequent than formerly presumed, and will be more often detected as physicians are on their guard.

We may first state that extrauterine pregnancy is primarily always tubal. The exact conditions leading up to this departure from normal and causing ectopic gestation must be, from the nature of the parts involved, very difficult to determine. So that it is questionable if we have really passed the speculative stage as to the etiology. Our lack of absolute information as to the normal meeting point in the genital canal of the spermatozoon with the ovum is the great barrier to progress in this investigation. It has been stated, but far from proven, that the normal point of fecundation of the ovum is in the Fallopian tube. Although this might seem possible, reasoning from the investigations upon lower animals, it is taking much for granted to presume this a normal condition in man. An excessive length of the tube, giving rise to a kink or narrowing by twisting of the tube, may be the cause of an obstruction giving rise to a retention of the ovum.

It is probable, however, that an active local condition is the cause of ectopic gestation more often

* Read before the Southwestern Iowa Medical Society, Osceola, Iowa, August 19, 1897.

Digitized by Google

than causes leading to a retention of the ovum by obstruction. A salpingitis, either recent or chronic, leaving a surface favorable for the attachment of the ovum, the irregularity of the tubal mucous membrane, preventing free passage of the ovum, and the normal peristalsis being interfered with, appear to be the more rational causes for this condition. A more recent hypothesis is that offered by J. C. Webster, assuming "a reversional state of the tubal mucous membrane to an earlier type in mammalian evolution that exists in certain cases and renders possible the attachment and growth of the ovum when other circumstances also favor it." This reversion of the tube offering a constant nidus for the fecundated ovum explains, if true, some points in this condition not so easily accounted for otherwise. Yet it is simply a speculation, and we are really as yet in the dark.

Tubal pregnancy (and all extrauterine pregnancies are in the beginning either tubal or interstitial) may be divided by the pathological anatomy into three classes: Those of the outer third, which is the class from which we have most often tubal abortion; a second class, comprising those in which the ovum becomes fecundated and grows in the middle third; and in this division there is more liability to a rupture into the broad ligament, for at this portion of the tube the mesosalpinx formed by the peritoneum has a greater separation of its two serous surfaces with more connective tissue between them, in this way favoring a rupture downward. The third division is that of the thicker and more vascular uterine or inner third of the tube, and from this variety we more often have the free and dangerous hemorrhages. In fact, it is a rule that the nearer the uterus the tubal pregnancy is located the greater in jeopardy is the life of the patient.

The symptoms before rupture or tubal abortion are those of the first months of pregnancy, plus those occasioned by the abnormal local disorder.

Of the first class it is not needed here to more than mention the change in the breasts, with perhaps a slight lacteal secretion if pregnancy is sufficiently advanced; the gastric derangement with perverted appetite; the patient perhaps sleepy, drowsy, etc.; the uterus undergoes the same changes during the first months as in normal gestation, but to a less degree. Hence we find an enlargement, but the growth not rapidly continuing; the cervix presenting the characteristic softening; the os is patulous; the whole uterine canal longer (although the use of the sound is to be prohibited for diagnostic purposes in this as well as in nearly all other uterine disorders). The menses are missed, delayed, or irregular, complete suppression not being so certain as in normal pregnancy, perhaps a missed period followed by menorrhagia being most often characteristic. A slight flow with the passing of a deciduous membrane is a strong diagnostic point, but cannot be taken as an absolute sign. Also, it should be noted as a point in diagnosis that the deciduæ of pregnancy are larger and three or even four times thicker than menstrual deciduæ cast off in what is called membranous dysmenorrhea. A period of sterility is often or usually noted. A tumor or fullness, usually well up in the pelvis and sensitive to bimanual examination, may be outlined on one side or in the posterior portion of the pelvis, which presents the question for differential diagnosis from an ovarian tumor, an old tubal disease or a displaced fundus. Pain, soreness, or a fullness in one side is often complained of. Repeated attacks of pain in an unruptured tube are in some cases noted and are often caused by distension of the tube from slight hemorrhage into itself.

The second landmark for diagnosis is at or immediately after the primary rupture or abortion. This occurs more often from the sixth to the twelfth week, but may be as early as the third week. The most usual rupture is into the free abdominal cavity. Not so frequently a downward rupture into the broad ligament, and much less often, so far as we know, may we have a tubal abortion through the abdominal ostium. The seat of the rupture has much to do with the symptoms at this time. A free rupture near the uterus may cause death in a few hours, whereas a bursting between the layers of the mesometrium may be less severe, give rise to less shock, and present pressure symptoms. The patient may suddenly feel "something give way," is seized with pain in the lower abdomen, or iliac region, is dizzy, faintness, general pallor, and nausea are marked, the voice is feeble, respiration irregular and labored, there is yawning, perhaps a frequent desire to relieve the bowels, pulse very rapid and weak, temperature subnormal, lower abdomen tender, perhaps slightly distended. When to these signs of internal hemorrhage we have added those previously given and can perhaps detect a soft mass on one side or posterior to the uterus, with perhaps a bloody mucus discharge from the uterus, we may be sufficiently certain of the diagnosis of ruptured tubal pregnancy and advise accordingly.

Regarding the treatment of this condition by electricity, a very few words will suffice. The early use of the galvanic current is in some cases of utility. Without question a woman is in a safer condition, the fetus having been killed by this means. Yet the trouble is only half relieved, for the placental growth is not checked at once, the circulation continuing for weeks after the death of the fetus, and suppuration may occur. So cases of diagnosed unruptured ectopic gestation may present themselves when operation is refused or must be delayed and the attending physician is justified in the use of this partial means to the desired end. The presumption, however, being that surgical aid must ultimately be called. The galvanic current is preferable to the faradic, for the reason that less peristaltic action of the tube is provoked, hence less liability to rupture. Galvan puncture or the injection of morphine into the sac are, in the present light of this condition, nothing short of malpractice. Sooner or later all but a very few require surgical interference and the earliest possible should be advised. Cases of alarming and fatal hemorrhage have been reported as early as the fourth and fifth week. The so-called colicky pains are signs of impending hemorrhage and demand abdominal section at once.

Digitized by Google

The operation and removal before rupture is among the simplest of abdominal work and should give a mortality not higher than that of simple ovariotomy. After rupture and with a large placenta conditions may be present which will tax to the utmost the skill of the operator. In extreme cases, with active hemorrhage, it is often best not to attempt the thorough removal of blood and clots. A single ligature or clamp may save life when a prolonged operation would be fatal. Intravenous saline water injections should be used to replace the loss of blood.

DEMENTIA IN ITS CLINICAL ASPECTS.*

BY MARY STRONG, M.D.,
OMAHA, NEB.

The term "dementia" is somewhat loosely applied to various forms of insanity where the mental state is of stupidity in varying degrees, from comparatively slight departures from the normal state, to the utter and complete extinction of all mental power. Pathologically, dementia is one of the degenerative psycho-neuroses; and when its symptoms become strongly marked it is strong evidence that such changes have occurred in the brain that recovery of reason is not to be expected.

The most common forms met with in general practice are senile dementia, paretic dementia (called also general paralysis of the insane), and the forms caused by syphilis. Terminal and secondary dementia, though of frequent occurrence, are, from succeeding the more active and troublesome forms of mental disease, more often to be found in insane asylums.

In their medico-legal aspects senile and paretic dementia are very interesting, and to the physician liable to be called to the witness stand, they are a prolific source of annoyance and trouble. As long as the law is so indefinite as to what constitutes a person non compos mentis, so long will the farcical spectacles of contested will cases in our law courts continue.

Senile dementia in its milder forms seems simply an exaggeration of that natural decay of the mental powers common to all who reach advanced years. Second childhood is a term often applied to such cases. These are not violent; they are simply big children again, emotional, often selfish to the extreme, and if they are unfortunate enough to escape intercurrent disease, they usually become quite filthy as they near the end. I think I may safely say that nothing can be more pitiful than the sight of some old person, once of vigorous intellect, suffering from mild senile dementia, just enough so that he is conscious, in his brighter moments, that he is losing his mind. The heartlessness and absolute cruelty which such cases often meet in their own homes and from their own sons and daughters is almost incredible. This generation is too apt to look upon the aged as nuisances, to be kept as far as possible out of sight. On the other hand, an old person of strong will, afflicted with this disease, can easily make a whole family miserable. It is an undoubted fact that in this class of cases the patient is better off in an institution where he can be controlled for his own good. As much may be done for the comfort of these cases by good nursing and careful management, the physician should advise according to circumstances, firmly but kindly, care at home, or where this cannot be secured, life in an institution, not always an insane asylum by any means. Two cases illustrate this very well.

CASE I.—An old lady was received into the Nebraska Home for the Aged while Dr. Spalding and myself were the attending physicians. She was 84 years old, and had been an exceptionally able woman, well educated, and when admitted was still unusually vigorous, bodily, for one of her years. But living with relatives, she had gradually become unmanageable, very obstinate and headstrong. Her memory of recent occurrences had entirely gone. She had on her person papers representing hundreds of dollars in value, liable to be lost, stolen, or given away in her wanderings about the city.

In this case there was no difficulty in proving her non compos mentis and having a guardian appointed. For a few months she was hard to manage, as she wished to roam the streets, but with an attendant she could be led around the block and then would readily go in. The greatest danger for her was, as for many of these dements, that by her ill-considered and violent movements a fracture might be sustained, but by care this was avoided. After the intellectual failure had become almost absolute, locomotion failed, not from any paralysis, but because she no longer knew enough to walk. She would lie for hours on the floor and play with pictures, etc., like an infant. As the degenerative process went on and the lower centers were involved, she was confined to her bed, but only for a short time. She lived for about forty-eight hours after swallowing was impossible, then died suddenly, probably from paralysis of the heart.

In her treatment bromides, hyoscyamus, and a little conium were given while the motor activity was so great. Laxatives as needed, proper diet, and cleanliness comprised the rest of the treatment. No opiates were given.

CASE II.—This case approaches in some symptoms to paretic dementia, but as it was in an elderly woman it was considered probably senile.

Mrs. J., aged 65; Douglas County Hospital; seven years ago she had right hemiplegia, from which she partially recovered, so as to be able to walk, but her mind has been gradually failing since then. Very hard to care for, unreasonable, kept the family (working people) up at night changing her position in bed, getting her up or down, getting her drink, etc., every few minutes. Then she would sleep in the day. She had caused one fatal accident and severe injury to another person by meddling with a lamp. Very stupid and obstinate in her expression, also very fat. Had attacks of difficult breathing, supposed by the family to be due to asthma.

Admitted March 12, 1897. Heart's action feeble. No abnormal sounds. No evidence of asthma nor of any diease of lungs. Urination very frequent. Urine

*Read before the Medical Society of the Missouri Valley, Council Bluffs, Ia., September 17, 1897.

Digitized by Google

of bad odor and pus was found in abundance in it. Could walk about a little. Was seen by Drs. Milroy and Bridges a number of times. Had digitalis, pot. acetat., also aromat. spts. ammon. for the attacks of cardiac dyspnea, and small doses of morphine and atropine at night. Irrigating the bladder soon greatly improved its condition, and she was induced to keep still at night. For about six weeks she improved slightly in body, but mental failure went on, then severe dyspneic attacks began again, worse at night. Stropanthus did no good. In two weeks more she had failed much and would fall if she tried walking, unless closely watched. The course of her disease was now steadily downward.

July 15 she seemed brighter, but about 5 P. M. she had an apoplectiform seizure, accompanied by symptoms of heart failure. This left her right side paralyzed again, but by the next day she has some power over it. Speech difficult. She never was able to sit up again. About August 1, bedsores appeared in spite of all care. Her relatives insisted on letting her drink all the milk and water she wanted while they were present, and the excessive activity of the kidneys which this produced made matters much worse, as she now gave no notice of her needs in this direction.

August 3, profuse green projectile vomiting came on, and next bulbar symptoms appeared, with the peculiar odor which seems to be from internal decomposition in these cases. Perspiration excessive, thick, greasy, and offensive.

She lived, like Case I, about forty-eight hours after swallowing became impossible. For the last twenty-four hours there was a peculiar arhythmic character to the respiration, a lack of co-ordination of the diaphragm with the chest muscles. She died quietly August 7.

Paretic Dementia.—This form of dementia has a great variety of names,—progressive paralysis of the insane, general paresis, etc. Its special characteristics seem to be a gradually increasing loss of mental powers, connected with special delusions (delirium of grandeur), and an also gradual loss of motor power, ending in complete paralysis. Usually the first symptoms noticed are those of a remarkable change in character and disposition, so that the person does things unlike himself. The stingy, miserly man gives largely to charities, gaining much in public esteem thereby. The careful merchant makes large and foolish investments. The staid father of a family runs away with a servant girl quite the reverse of beautiful. In Detroit some ten years ago a man who had previously borne the highest character was arrested for some particularly unreasonable acts of dishonesty, and public indignation was strongly excited against him, to be changed to pity when, long before the time for trial came, it was known that other symptoms of paretic dementia had rapidly appeared, and the unfortunate man was destined to end his days in the insane asylum instead of the state prison. Assaults on the person are not infrequently committed, or at least attempted, by men in the early stages of this disease. Frequently, too, the slight defects of gait are noticeable,—the beginnings of the paresis. It is in this stage that medico-legal questions are apt to arise. Unquestionably some of these patients in this early stage are able to form correct judgments and conduct themselves like sane men, for in some the paretic symptoms are in excess of the mental ones. Still there is usually, even in these cases, a degree of depression of mind, often ascribed to worry over business affairs, etc.

As the disease progresses the stage of excitation is reached and the characteristic delirium of grandeur is usually very much in evidence. One old patient assured us that a near relative paid over $100,000 a year in taxes, that her father owned extensive railroad systems, etc. Another day she was going to marry the chief of police in Chicago and tried to persuade one of the nurses to go with her as maid. Yet on many occasions it required careful questioning to bring out any of these delusions.

Another case, inclined to be dangerous in the early stages, now is very quiet, usually good-natured, but quite stupid, though he still can walk pretty well. All the evidence of the characteristic delusions I can elicit in his case is that he is always very well indeed, and tries to show me how strong he is. Like most dements, where motor activity is in abeyance, he is a great eater and very fat, and it is difficult to get him to take any exercise.

Dementia depending on syphilitic brain lesion is probably much more common than is generally suspected. It is often indistinguishable, per se, from paretic dementia, though put in a class by itself by many authors. Specific disease is given prominent place as a cause of this malady by some alienists. But we sometimes see cases with an old specific history, who present hemiparesis or even complete hemiplegia, who may improve for a time on potassium iodide and mercury, who never present any signs of active insanity or any mental aberration other than a progressive mental weakening, till at last, if death does not come from the paralysis or some intercurrent disease, a condition of complete dementia is reached. One case will serve as an example: B., a railroad employe, 37 years old, suffered from specific disease in early manhood. About four years ago he had a sudden attack of right hemiplegia, and since that time, though he recovered so that he could walk about, was never able to work. Received repeated thorough and prolonged treatment with potassium iodide, but it effected no improvement in his symptoms and at last seemed to make him worse, so it was stopped. For four or five months he presented a gradual failure of mind, without any increase of physical symptoms, becoming quite stupid and filthy in his habits. One morning I was hastily called and found he had an apoplectiform seizure. This left him entirely paralyzed on the right side and unable to speak. His tongue was paralyzed (motor aphasia), but I think there was also word deafness, although under the circumstances I could not make this certain. At any rate there were co-existent symptoms of right hemiplegia and bulbar paralysis. There was no improvement after this, but instead a paretic condition of the

Digitized by Google

left side appeared, then spastic contraction of both legs and the right arm. He lived about four weeks after the apoplectiform attack. For more than a week before death respiration was entirely abdominal, the diaphragm being apparently the only respiratory muscle acting. Death took place painlessly so far as we could judge, and probably, as in the case previously mentioned, from cardiac paralysis.

Autopsies could not be secured in either of these interesting cases. I am not writing on the pathology of this disease, else much might be said as to the probable location and character of the lesions.

As dementia once fully established probably always goes on with greater or less rapidity to a fatal termination, the matter of proper care is most important. To keep the patient clean, secure exercise as long as it is possible, regulate the diet carefully both as to quality and quantity, to keep the condition of digestive organs, kidneys, and skin as near the normal as is possible, to secure a proper amount of sleep, these seem about all we can do for these unfortunates. If this can be done at home, well; if not, and in some few cases of senile and many of paretic dementia it cannot, then the asylum.

THE MEDICINAL TREATMENT OF PULMONARY TUBERCULOSIS.*

By W. F. MILROY, M. D.,

OMAHA, NEB.

My first experience in the practice of medicine occurred fifteen years ago in a large New York hospital. The danger of allowing tuberculous patients in the wards of a general hospital was, at that time, only beginning to be appreciated and in the City Hospital, to which I refer, a liberal sprinkling of them was constantly found in all the medical wards. The following was the usual sequence of events: Each member of the staff, while occupying the subordinate positions of junior and senior assistant during his first year of service, observed these tubercular cases temporarily benefited or more frequently pursuing an uninterrupted journey to the grave, under the orthodox treatment with hypophosphites, iron, cod-liver oil, and whiskey. He lamented the cruel fate which consigned these unfortunates to such a doom and, after a more or less thorough study of the subject, evolved a plan of treatment which would, in his judgment, arrest the progress of the disease in at least a portion of the cases. Upon arriving at the dignity of house physician, with full authority, the new scheme of treatment was inaugurated with much enthusiasm. His cases were carefully watched and systematic physical examinations made and recorded. The results falling short of what had been anticipated, the plan of treatment was modified from time to time and long before his six months of service as head of the division had expired, he found himself back where his predecessors had wound up, employing the same old routine treatment—hypophosphites, iron, cod-liver oil, and whiskey. His faith in the power of drugs to cure disease had not increased, the labor of his junior assistant, as amanuensis in recording cases, was wonderfully lightened, and if a sadder, he was a wiser young man.

As this short paper can only touch upon a few of the salient points in so great a subject, I will pass over with a very few remarks the extensive field of experimentation which has been thoroughly cultivated during the last dozen years. At the time to which I have made reference the main reliance in the treatment of consumption, so far as the internal administration of remedies was concerned, was upon giving support to the system which it was hoped would counteract the destructive process carried on by the disease. The want of success obtained by these measures was truly disheartening and led investigators to devote their efforts to the discovery of some plan by which the development of the tubercle bacilli might be arrested. These studies I shall not enumerate. The sum of the results to which they have led may be expressed in the words of Dr. H. C. Wood, as follows: "No known dose of any germicide which can be borne by the human system has any distinct power in even inhibiting the growth of the tubercle bacillus when once lodged in the body." Professor Delafield says: "The curative treatment of chronic miliary tuberculosis is embraced in two principal things—climate and feeding." However, these and other authorities admit the value of a few remedies in relieving certain symptoms, notably creosote (or its most important constituent, guaiacol), in relieving the bronchitis.

Myself a pupil of Delafield, I feel a hesitancy in adding another word to this paper. Nevertheless, I shall take the liberty of asking your attention to one topic further.

It is a matter of universal observation that while all human beings are exposed to the contagion of this disease, not all become its victims. To explain this fact it has been suggested that the ultimate factor which determines the susceptibility of an individual to the attack of the tubercle bacillus is the condition of the nevous system. Assuming the truth of this proposition, a rational course of treatment would be found in the use of such remedies as increase the power and efficiency of the nervous system in the performance of its functions. Of the drugs at our disposal which produce such an effect strychnine is the most powerful. In small doses it stimulates, in large doses tetanizes, and in still larger doses paralyzes. In the June number of the WESTERN MEDICAL REVIEW I called attention to the method of utilizing this remedy in consumption, as suggested by Dr. William Pepper. It is the aim in this use of the drug to give it in the maximum stimulating dose and to maintain this maximum for a long time. To do this involves an increase of the dose from time to time as a tolerance becomes established.

I have made use of this treatment to some extent during the past year and ask now the privilege of referring to my own experience.

From the observations thus far made I am led to the opinion that in cases far advanced little or no benefit is to be hoped for; that in those in which excavation

*This and the two papers following were conjointly read before the Omaha Medical Society, November 23, 1897.

Digitized by Google

has occurred to only a limited extent the disease may be held in check for a longer or shorter period and all the symptoms greatly ameliorated, and cicatrization of the cavities may possibly be secured; and that in cases in which the first stage of the disease has not been passed cure may be effected.

In the publication referred to I alluded to a case which I believe bears out the claim I have just set forth. Briefly the case was as follows: An American woman, 28 years of age, the mother of three children, presented herself at my dispensary service in the Omaha Medical College in September, 1896. Her parents had both died of consumption and one brother was at the time very ill with the disease. Until two months prior to her coming she had been well. At that time pulmonary hemorrhage suddenly appeared and this had been repeated, in greater or less amount, almost every day since. She had lost twenty pounds in weight during these two months. She had a violent cough, with abundant, foul-smelling expectoration of muco-purulent material, drenching night sweats, severe hectic fever, severe dyspnea, voice husky, no appetite, with frequent vomiting after taking food, constant and increasing pain in the chest, and great general prostration.

Physical examination showed marked depression over each apex in front, with entire absence of chest expansion at the upper part, and, in a word, well marked consolidation in each apex.

I would have estimated the duration of life remaining to this woman at six, or at the most, nine months. To-day, and for two or three months past, she has been, as far as I am able to discover, a perfectly sound woman. It is my belief that strychnine cured her, and in so doing accomplished a feat that I have never before witnessed. The maximum amount administered in this case was three-fourths of a grain of the sulphate per day, taken in four doses, which amount she took continuously for nearly three months. She took no other medicine whatever, except for a few days early in the disease a few doses of belladonna and zinc oxide to stop night sweats.

Not to consume your time with details of this case, which to me were exceedingly interesting, I will content myself with mention of one point. On July 13, at which time the patient had been taking regularly three-fourths grain per day of strychnine for about two and one-half months, she felt slight toxic symptoms, which she had been taught to recognize. Though the treatment was continued these symptoms were not again observed until seven days later, July 20, and again on the 21st. The treatment was carried on without interruption, in spite of these symptoms. After an interval of five days these toxic symptoms once more appeared, much worse than on any former occasion. About fifteen minutes after taking the dose the patient's knees gave way, so that she fell to the floor. She could speak only with great difficulty, and felt a stiff, drawing feeling through the jaw and back of the neck. The muscles of these parts, the patient stated, twitched and jerked, and these convulsive movements were well marked in the wrists, sides of the trunk, and the knees. The symptoms were bad for about ten minutes and disappeared at the end of half an hour. Had I seen the patient after the first appearance of these toxic symptoms I would have diminished the dose and avoided the occurrence just narrated, which was too near the danger line to be comfortable. An interesting question has arisen in my mind as to why, after so long a period and without increasing the dose, symptoms of poisoning should appear. May it not be true that the presence of the turberculous process in the lungs acts as an antidote to the strychnine, and as the disease ceased its activity that which was formerly only a tonic dose became a tetanizing dose?

I have related this case as illustrative of what is possible in the use of this treatment. I have found great benefit from it in other cases and am inclined to believe that when used very early it may arrest the disease in a large number of them.

INHALATION TREATMENT OF PULMONARY TUBERCULOSIS.

BY W. H. CHRISTIE, M. D.

OMAHA, NEB.

Inhalation has been used in the treatment of pulmonary tuberculosis in many forms. Results are not as gratifying as investigation, experimentation, and anticipation could lead a hopeful profession to expect. In fact, for the arrest of the development or the progress of this disease, per se, directly, atomization of medicaments for inhalations, from the results of the past to the present date, promise but little. That much can be done to relieve accompanying or resulting evils in the history of the disease, fortunately, the outlook is not so unpromising. Among such we would recall hyperemic, congested, inflammatory, and ulcerative conditions of the respiratory tract from the nostrils and pharynx to the alveoli of lungs. When the congestion is more acute than passive, characterized by a dry cough, irritable in character, with a deficiency of secretions or expectoration, hot, moist, sedative inhalations are beneficial. Such conditions may arise from a recent cold, influenza, and la grippe in the history of tuberculosis. Turpentine, eucalyptol, or any of the essential oils in small quantities, in an open vessel over a flame, brought to boiling, would make a temporary adaptation of means to ends. Some of the lighter fluids nebulized, containing morphia, conium, etc, with or without nascent chloride of ammonia in a weak solution, will soothe and aid exfoliation of mucous cells, etc., and facilitate expectoration.

Following the suggestions of Bennett and Trouseaux in the use of balsams by fumigation by throwing them on hot coals, etc., balsam of Tolu and Peru benzoin camphor have been nebulized and sprayed, and the broken diluted atoms thus inhaled. Twenty parts of the balsams being dissolved in sixty parts of ether in a wide-mouthed bottle have been inhaled from the bottle. A dram of any of the balsams in an ounce of boiling water in any atomizer and inhaled. This treatment is better where there is more secretion and a cough. Benzoate of soda, benzoate of ammonia have both had their advocates. These may be used with or

Digitized by Google

in a light vehicle, as water, in an atomizer and in considerable quantities, half to one dram to the ounce. The use of eucalyptol, menthol, terebene, and camphor may be used in a heavier menstruum, as vaseline or alboline.

℞ Camphor,
Menthol, . . aa from grs. ij to x.
Alboline . . . . ℥ ij. M.

This makes a very good stimulating antiseptic inhalent. It is better for the pharynx and nostrils than for deeper inhalations. A few drops of 5 to 15 per cent. dissolved in alcohol or encalyptol, menthol, or any of the essential oils, as peppermint, oil of anise, etc., all have their advocates and may be used. Methods: Cotton in a pipe, small pocket inhalers, paper rolls or tubes with medicated cotton in one end and inhale from the other, have all been used. Ethyl iodide I have used more than any other of the more active stimulants, and antiseptics, as iodine, creosote, iodoform, bromine, or tar. The method has been to drop two or three drops upon a handkerchief and inhale. A few drops may be put in alcohol in an open bottle and inhaled. Where ulceration of the larynx is present, the cough nagging, creosote in 2 per cent. solution with chloroform and water in an atomizer will be found of advantage. Conium may be added to the above, fifteen to twenty drops of the fluid extract, with or without chloroform, or iodine may be substituted instead of the creosote, and glycerine combined, as:

℞ Tr. iodine . . : gtt. x to xx.
Glycerine . . . . ℥ iv to vj.
Conium . . . . ℥ i.
Aqua dest. . . q. s. ℥ ij.

M. Sig.—Use in a nebulizer and inhale three or four times daily when bad, and as improvement occurs from the irritable cough, once or twice daily.

Fluorine has had some very warm advocates, particularly among the French physicians. The method is expensive, as a cabinet must be used and the air pumped in the same, passing through a solution of hydrofluoric acid, twenty or thirty liters being used with every cubic meter of air. Chlorine,too, has its advocates. Sometimes these substances cause so much irritation about the fauces that it is necessary to allay the undue irritability with a spraying first of 2 to 4 per cent. solution of cocaine, or again the spraying may be done in relays, using a little at a time, waiting a brief time and repeating thus several times during a sitting. By the effort of deep inspiration we do more than dress a diseased mucous membrane, but we drive air in, opening up anew areas, where but a small portion has been going more is thus sent. We dedicate anew to respiration that which has been as "waste places." Diluted oxygen in different forms has proven of advantage. None artificially prepared has equaled that furnished by nature in the dry table lands of the interior at an altitude from 3,000 to 10,000 feet above the sea level. A full discussion of nature's atomization of the atmosphere and that artificially used in cabinets takes me beyond the realms of the intentions of this paper, neither will I discuss carbon dioxide, the cow stable atmosphere, or the inhalation of sulphuretted hydrogen for the same reason.

CLIMATIC MANAGEMENT OF PULMONARY TUBERCULOSIS.

By B. F. CRUMMER, M. D.,
OMAHA, NEB.,
PROFESSOR OF PRINCIPLES AND PRACTICE OF MEDICINE, CREIGHTON MEDICAL COLLEGE.

It is not my intention simply to mention climatic treatment in order to condemn it, but it is my firm conviction that as ordinarily applied it constitutes one of the most serious abuses within the range of medical practice. The absolutely false doctrine that there is something specific and curative in certain climates seems to have become so thoroughly engrafted in the minds of the non-medical public that the first intimation from the attending physician that tuberculosis exists starts a panic in the minds of the patient and friends, the surcease of which is only met by the selection of some new abode for the patient, often without regard to his personal condition or fitness for the change made. This move made, little or no thought is given to even the most ordinary indications for medical treatment, and the climate is expected alone to perform a miracle. That this false and often ruinous belief has been fostered by the medical profession is a humiliating confession that we cannot avoid or gainsay. If no other proof were needed of the dire results of this promiscuous slaughter of the innocents, the fact that the citizens of the much-boomed western health resorts are now crying out against the wan, expectorating multitude that threatens them with positive extermination, willing even to kill the goose that lays the golden egg for them, is evidence sufficient of the gigantic proportions of this evil. If the congregation of these phthisical cases is a menace to their home population what must they be to one another, already debilitated by disease and taking pot luck for their housing and sustenance. I do not deny that there are patients and conditions for which a change of climate would be beneficial, even imperative, but I believe that the promiscuous prescription of a change of climate for consumptive patients is a procedure founded on ignorance and a cowardly tendency to shirk responsibility on the part of medical men that is without excuse or palliation. In the first place a phthisical patient with fever should not only remain at home, but in bed, and is without exception made worse by a journey and the hardships of adapting themselves to new quarters in a strange region. The more advanced case, with extensive softening, is invariably made worse by a journey of any length, and the effect of a change of climate is usually nil with this class of patients. But here it is that the most pressure is brought to bear on the physician to consent to a change, and it requires some moral courage to stand out against such a proposition, especially when in this connection it is broadly intimated to the attendant that his own efforts in the case have been unavailing. Yet I maintain that the only proper course to pursue is to advise absolutely against it. A full explanation of the reasons for this

Digitized by Google

advice will convince persons of intelligence that the course is a wrong one, and much hardship and suffering thus be avoided. Even those in the incipient stage of pulmonary tuberculosis must be absolutely imbued with the idea that the change must be a permanent thing, and that if they find the climate recommended gives relief or assists in a cure, then they must take up their permanent residence there. Any tentative or half way course can be productive of nothing but chagrin and bitter disappointment. As applied to our own locality the necessity does not so often arise for recommending a change as in the more damp and sodden soils of some of the eastern states. Here our percentage of sunshine is great and our soil dry and porous. Often the consumptive patient here can find his change of climate right at home by changing his occupation so as to insure a life out of doors, and numerous instances of relief and cure in my own experience attest the beneficial results of such a course. Practically, and in a few words, my idea of a change of climate for phthisis is that it is applicable only to the first stage. It should generally be a permanent change, and involves usually a change of occupation and mode of life; that many times this can be accomplished without much change of location, and that especially in so favorable a climate as that of Nebraska the exchange of a city life and indoor occupation for residence in the country and some vocation that keeps the patient in the open air and within reach of medical supervision is the best change possible; that in contemplating the disposal of any phthisical individual the ranch, the farm, the prairie, or foot-hill existence, even with some hardships thrown in, should always take the preference over renowned health resorts, with life in big hotels or stuffy boarding houses.

[Dr. Crummer's paper on Diagnosis of Consumption will be published next month.]

DISCUSSION.

After the reading of the three papers the discussion was opened by Dr. McClanahan, who said that harsh breathing was worthy of more extended notice as a diagnostic symptom. High temperature was an early symptom and foretold hemorrhage. Care should be taken in percussing children to strike lightly. Shrinking at the apices was also important. Consumption could be cured if diagnosticated early. Medicinal treatment, hygiene, out-of-door life, and long walks were all very valuable.

Dr. Foote said that frequent pleurisies are indicative of tubercle. Frequent attacks of any pulmonary disease are also. There are conditions that simulate tuberculosis, that even kill, and yet are not tuberculosis. The presence of bacilli by no means ends the case.

The mere change of climate is often abused. Patients meet new physicians who do not know them, lack personal interest, they have to live in hotels, have bad surroundings, and are made worse. Yet in suitable cases, climatic change is very desirable. A dry climate, high altitude, an unchanging atmosphere, little sand in the air, a table properly ordered, systematic breathing exercises are all valuable. These cases are greatly benefited. Of course, lost lung cannot be recreated. If Dr. Milroy's case was tuberculosis and not broncho-pneumonia, its cure was an advance. The strychnia did certainly improve the digestive conditions.

Dr. Christie said that early diagnosis was a most valuable thing to strive for. He endorsed Dr. Crummer's views in all things. He believes that no drug makes blood and helps elimination so well as strychnia. It arouses activity in all parts of the system, nervous, digestive and all, and should be used in almost toxic doses.

Dr. Hobbs said that being a student of Shirley, of Detroit, he would speak of his methods, which were to place the patient in a room 8x6, with a spray of sodium chloride going. In the room was chloride of lime in solution. Upon this was poured nitro-muriatic acid to evolve chlorine gas. The first day the patient was kept one minute and this time was extended to fifteen. He then used a solution of iodine, 1-24 to 1-12 grain a day. The same drug was also used hypodermically. Diet was carefully looked after. The stomach made to be in the best possible condition. Arsenic and strychnia were also used. The pneumatic cabinet gave good results.

Dr. R. C. Moore said that we must consider the two forms of trouble, the acute miliary and the subacute. We must always be careful to differentiate between acute miliary trouble and typhoid. In the former we have a contraction of the abdomen, in the latter tympanitis; in the former we have a sharp red tongue, in the latter a flabby and indented tongue; in the former tachycardia, in the latter, early, a slow pulse, rarely over 100; later the petechiæ and mental conditions render diagnosis more easy. He also had believed that dullness was diagnostic, as was hemorrhage. He was also careful not to overdo percussion in children. He was more enthusiastic as to climate. He knows of recoveries in the mountains and on the plains of Texas, New Mexico, and in south California, where, as in San Diego, ninety-nine out of one hundred days are sunny. If patients go away, squat around, weigh daily, and do nothing they always do badly. They must have out-of-door life. This forces deep inspirations. As to treatment, he felt that no internal medicine was alone curative. He also uses strychnia in large doses, 1-12 and $\frac{1}{8}$ grain, three times a day, not so large as Dr. Milroy's $\frac{3}{4}$ grain. He also uses cod-liver oil especially in rachitic children, who always thrive upon it. He used oil of peppermint chiefly as an inhalation, placed in a paper tube on a piece of cotton and breathed or sucked very often daily.

TEN thousand people are annually cremated in the six public crematories of Tokio.

THE jackass is not the only animal that graces this world with its presence. There are others.

IT is claimed that a mixture of eucaine hydrochlorate and cocaine hydrochlorate is just as efficient as cocaine alone as a local anesthetic, and much less dangerous.

Digitized by Google

Practical Surgery.

By J. E. Summers, Jr., M. D., Omaha, Neb., Prof. of Surgery, Omaha Medical College

II.

TREATMENT OF WOUNDS—(Continued).

Disinfection of the Hands and Forearms of the Surgeon.—This must be both mechanical and chemical. The surgeon and assistant should thoroughly scrub their hands and forearms with warm water and soap, being particularly careful to remove all dirt and macerated epithelium from around and under the finger nails, using the scrub brush and nail cleaner carefully. Both the brush and nail cleaner ought to be boiled in ordinary water or immersed in a 5 per cent. solution of carbolic acid in water before using. After this mechanical cleansing, wash the hands and forearms in sterilized warm water, and in addition have a little alcohol poured on the hands. Then immerse the hands and forearms in a 1-1,000 solution of bichloride. Green soap is preferable to other soaps, and especially is this so when a little corn meal has been added to it. Green (soft) soap and turpentine, with liberal quantities of ordinary warm water, a good nail brush and nail cleaner can render the hands proof against infecting a wound. Any method of sterilization of the hands must be conscientiously carried out, and the simple ones given are as reliable and more easy of accomplishment than many others.

Sterilization of Ligatures and Suturing Materials.—Silk which has been boiled for one-half hour before an operation is practically safe, but it may be made and preserved sterile by boiling in water for one hour and then placing it in a 5 per cent. carbolic acid solution, made by adding the acid to freshly boiled water.

Silkworm Gut and Silver Wire.—These are best sterilized by boiling in water from fifteen minutes to half an hour immediately before using. Some surgeons, however, consider the immersion of these materials in a 5 per cent. solution of carbolic acid in water sufficient for their practical sterilization. The most modern methods for the sterilization of catgut is by means of formalin, the advantage being that the gut is rendered less soluble in the tissues and therefore more reliable. After the gut has been impregnated with formalin it can also be subjected to boiling in water without losing its tensile strength. The gut is first immersed in a solution of formalin of from 2 to 4 per cent., according to its size, and allowed to remain in the solution for a period of from twelve to forty-eight hours. The formalin is then removed by soaking in clear water for twelve hours, the water being changed frequently. It is then boiled in water for fifteen minutes, after which it is transferred to a vessel containing alcohol, where it may be kept until required for use. From 2 to 4 per cent. of carbolic acid may be added to the alcohol, as it makes the gut more firm. It should be placed in plain alcohol for about a half hour before using. Before boiling the gut, it should be wound tightly on a glass spool or dry cork, the object being to keep the gut in a high state of tension. The cork has some advantages over the glass rod, in that it expands by the absorption of the water, and thus increases the tension on the gut.

One of the best methods for the sterilization of catgut *without* the use of formalin is the following: A reliable article of catgut in different sizes should be wound and twisted into loose rings about three-fourths of an inch in diameter. These are placed into a 1-1,000 solution of bichloride of ether, remaining for twenty-four hours. The ether abstracts the fat from the gut. It is then removed and placed in bichloride of alcohol, 1-1,000 for twenty-four hours. The gut is then put into alcohol, and the bottle, a wide mouthed one, lightly stopped with sterile absorbent cotton, placed in a vessel of boiling water and boiled for fifteen minutes. This boiling is repeated for three successive days, adding sufficient alcohol when too much evaporates. After the third boiling the gut is placed in absolute alcohol and is ready for use. When required it must be removed from the bottle with sterilized forceps. If thought best to chromicise this catgut, in order to add to its strength and resistance to rapid absorption, it is placed into this solution: Chromic acid 1 part; carbolic acid 200 parts; sterile water 2,000 parts. After twenty-four hours the gut is removed and placed in absolute alcohol. Bichloride of mercury should not be added to the preserving absolute alcohol, as it renders the gut too brittle.

It is becoming the custom among surgeons, and, in fact, of some hospitals of best repute, to buy catgut all ready prepared. The only articles, however, which are reliable are those which are prepared in hermetically sealed glass tubes, requiring the breaking of these for their use.* Complex arrangements furnished by the supply houses which admit of catgut and silk being pulled out in shorter or greater lengths are dangerous and should be avoided, as the material remaining in the bottles may become contaminated from without. For those who do a very limited amount of surgery, and, in fact, for ordinary minor surgery in the hands of any one, for the ordinary minor surgery of the office and private family, needles of different sizes and curves, already threaded with silk, silkworm gut, or catgut, sterilized and sealed in glass tubes, as furnished by the supply houses, are convenient and thoroughly reliable. For buried absorbable sutures in certain operations, especially for the radical cure of hernia, there is perhaps no material equal to kangaroo tendon. For its use we are indebted to Marcy, of Boston, and from him the best article, either sterilized or non-sterilized, is to be procured. The sterilized article is expensive. However, a large bundle of the tendons can be bought for a moderate sum and sterilized at home. The following is the method used and advised by Marcy: The tendons are first soaked in a solution of 1-1,000 of bichloride of mercury in water until supple. They are then carefully separated and dried between sterilized towels. After assorting them into small bundles, they are chromicised by placing them in a 1-20 watery solution of carbolic acid to which has been added 1-4,000 part of purified chromic acid. The tendons must be immersed in the solution

*Catgut prepared in this way can be bought from George Leavens, 72 Bible House, New York.

Digitized by Google

immediately upon the preparation of the fluid, since otherwise in a short period the chromic acid is thrown down as a sedimentary deposit.

The process of chromicization goes on more or less rapidly, dependent upon heat, exposure to sunlight, the quantity of material manipulated, and requires careful watching, since, if too rapidly effected or permitted to remain too long in the solution, the tendons may be easily ruined. When properly chromicised, the tendons should be of a dark golden color. When taken from the chromicizing fluid the tendons are best dried in the sunshine between sterilized towels, and should be immediately put in a carbolic oil, the whole process carefully conducted under aseptic conditions, the bottles securely corked and sealed. When wanted for use, the tendon is carefully taken from the bottle, soaked in a mercuric solution until supple, and then arranged in parallel strands, wrapped in a folded towel saturated with a 1 to 1,000 mercuric solution, the ends of the tendons exposed so that they may be withdrawn one at a time as selected. If more convenient, they can remain immersed in a dish of bichloride solution during the operation and selected as required. The amount of the bichloride contained in the suture does no harm to the structures in which it is buried; it is advantageous rather than otherwise. Many surgeons deem it unnecessary to do more than place the tendons into bichloride ether, 1 to 1,000, for twelve hours, and then remove them and place them, strung out, into a long narrow bottle filled with alcohol. For use they are removed as required and put into a 1-40 solution of carbolic acid in water.

Dressings and Instruments.—All materials used for covering and protecting wounds should be prepared and handled with the most scrupulous care. Dry sterile dressings are best used to protect wounds either aseptically or antiseptically made, from which little or no discharge is expected. All other wounds are more safely handled by being covered with dressings which are moist with some antiseptic fluid. If a dry dressing is employed to cover a wound which may possibly have become infected or is discharging pus at the time the dressing is applied, there will *always* be a greater or less accumulation of discharges under the dressing, just as pus is retained under a scab. Such a condition cannot help but interfere with the reparative process. Gauze (cheese-cloth) is the material usually used next the wound surface. Absorbent cotton is placed over the gauze, and over all a bandage or binder. One or two layers of gauze or cotton may be fastened over a dry wound by means of sterile collodion applied to the borders of the dressing. Gauze may be impregnated with some antiseptic material, as iodoform or boracic acid, or either these or some other drug in powder form can be dusted upon the wound before the gauze is applied.

Cheese-cloth may be bought from the dry goods houses at from 2½ to 4 cents per yard. To prepare for use, boil for fifteen minutes in a solution of carbonate of soda, 1 dram to 1 quart of water, and then for one-half hour in clear water; cut into sized pieces desired and put into an Arnold's or Boerkman's sterilizer for one hour before using. It is desirable in transporting gauze after sterilization to put it in some sterilized glass vessel or jar.

Iodoform gauze may be thus prepared:

Salt solution soapsuds .	11 ℥
Iodoform powder . . .	10 ℥
Sterilized gauze . . .	3 yards.

Mix thoroughly. Rub the solution well into the meshes and when thoroughly impregnated, roll loosely and keep in colored glass jars.

We prepare sterile collodion in this way:

Ether (Squibb's),	
Alcohol (absolute), . .	aa ℥ viss.

To this add *m* xvi of a solution made by dissolving gr. xv of bichloride of mercury crystals in absolute alcohol ℥ xi. Then add of "Anthony's snowy cotton" sufficient to make a syrup.

Every surgeon should own some kind of sterilizer, the simplest, best, and cheapest being the Boeckman or Arnold. In one of these the instruments, silk, or silkworm gut, together with towels, aprons, gauze for sponging and dressings, may be sterilized at the patient's home during the hour preceding the operation. On a pinch, gauze or other material to be used as a dressing can be boiled in any vessel or saturated with some antiseptic solution, as carbolic acid, 1 to 20 in water, or bichloride 1 to 500. After the soaking the gauze had better be transferred to weaker solutions before being wrung out for use. It is best to keep at hand moist antiseptic gauzes from reliable houses. These gauzes are more convenient, safe, and economical if bought in one-yard packages. The continued reopening of the five-yard packages leads to danger of infection; besides, they are bulky. Very little gauze or cotton is needed in any freshly made wounds unless oozing is anticipated or drainage provided for. A light gauze or cotton collodion dressing is preferable.

Instruments can be sterilized by boiling in any kind of a receptacle; those made especially for the purpose are most convenient. To prevent rusting and to raise the boiling point of the water, add carbonate of soda in the proportion of one tablespoonful to the quart. If instruments are carefully scrubbed with green soap, turpentine, and warm water, washed off with ordinary clean water and placed into a 1 to 20 solution of carbolic acid in water for half an hour, and then transferred to a weaker solution just before the operation is to begin, they can be relied upon *not* to infect a wound.

Sponges.—Sterilized gauze cut into suitably sized pieces is now most often used for sponging wounds. Sea sponges, if properly prepared, are safe and better than any other material for sponging. All loose sand should be beaten out of the sponges. After this they are put in water, sharply acidulated with muriatic acid, and allowed to remain twelve hours. This will dissolve out all of the lime salts they contain. The sponges are then washed in clear water and put into a 1-20 solution of carbolic acid in water. In twelve hours they are ready for use.

Operating Outfit.—It is good practice to have one's

Digitized by Google

outfit for a proposed operation sterilized at home before leaving for the place of operation. Instruments are boiled, wiped dry with a sterilized towel, and placed in a sterilized canvas roll; in this roll are put needles, silk, and silkworm gut wrapped in a piece of sterile gauze. The roll is then pinned up in sterilized towels. Drainage tubes (glass and rubber), nail brushes, towels, operating gowns (always three or four for use of assistants), bandages, gauze, and cotton, after sterilization in a Boerkman sterilizer, are similarly wrapped up. Instrument trays are likewise sterilized and protected. A cheap canvas "telescope" of medium size will hold the necessities for any surgical operation. Everything can be carried in one of them, except anesthetizing outfit, jar or iodoform gauze, sterile collodion, iodoform, and boric acid in dusting bottles, turpentine and alcohol, bichloride tablets, soap mixture, antiseptic silk, and catgut. These are put in the surgeon's bag.

When an operation is to be done in a private dwelling, the best lighted room is selected in which to operate, draperies are removed as well as all light furniture; the woodwork around the windows and doors is gone over with damp towels. If there is no carpet on the floor, this should be mopped. Although it is preferable to take up a carpet from the floor of a room to be used as an operating room, it is not essential, as the carpet may be sprinkled with water, and that part under and around the operating table protected with sheets. There should be no dusting or sweeping. A visit to the kitchen and other rooms will result in the finding of an operating table, either long enough for the case in hand, or it may be made so by placing a small table at either end to support the head or feet; in lieu of the small table, a box rested upon a chair does very well. In most cases a table sufficiently long to support the head, trunk, and lower extremities as far as the flexure of the knees will do. A short kitchen table can usually be lengthened as described so as to answer the purposes of an operating table better than can the usual extension dining-room table, which is too wide for efficient aid from an assistant when, perhaps, it may be most needed. When the Trendelenburg posture is required and the surgeon has not at hand a Krug frame, or some similar contrivance, the difficulty is easily overcome by tightly pinning a folded sheet or blanket around the four legs of a stiff-backed chair, the sheet or blanket being so fastened that it covers well the bottom of the chair legs. When the chair is placed upon the table in the position of a "bed-rest" it makes a frame upon which, with the legs hanging over the pinned sheet or blanket, a Trendelenburg position of from 40° to 45° is obtained.

One table is selected upon which to place instruments; another for dressings and sponging material. Most any piece of furniture having a flat top will do quite as well as a table for these purposes. Chairs should be placed convenient to both the operator and his assistant, upon which may be paced bowls to contain boiled water or antiseptic solutions in which their hands may be dipped from time to time. The anesthetizer should receive the consideration of a chair. In the houses of the very poor, one or two chairs, a box, and even the floor may be made to answer all necessities.

Disinfection of the Skin of the Patient.—When the nature of the case allows two or three days preparatory treatment, the patient should be given some internal medication to stimulate the physiological functions of the skin, and also one or two immersions or sponge baths. During the baths special pains must be taken to thoroughly cleanse the area of a proposed operation wound. Especially ought this to be insisted upon when either the feet, umbilicus, or hairy parts of the body are within the field of a proposed operation.

On the morning of the day of operation, or the evening before, the skin immediately over and for a reasonable distance around the site of the operation must be scrubbed with soap and water and then washed with ether or alcohol. It should then be covered with towels or pieces of clean muslin or cheese-cloth which have been saturated in and then partially rinsed out of a solution of bichloride, 1-1,000. It is well to cover this with florist's oiled paper or some other impervious material, as rubber tissue or oiled silk, which have also been washed in a bichloride solution. Over all apply a bandage. (TO BE CONTINUED.)

A BABY just born, according to statistics, has just one chance in five of growing up.

IF a woman who, when riding a bicycle, would use her knees less and her ankle joints more she would look less ridiculous.

CHRISTIAN SCIENCE.—The young seamstress, who is a thorough convert to "Christian Science," made her appearance with a violent influenza, when her employer exclaimed:

"Why, Mary, where did you get that cold?"

"Oh, I haven't a cold, ma'am," said Mary.

"It's absurd for you to say that you haven't a cold when you know that you have."

"Well, ma'am," said Mary, with some hesitation, "I know I haven't got a cold, but—but I'm threatened with a belief that I have one."—Drug Topics.

IS THERE a typho-malarial fever? Yes, in the brains of the doctor, but not in the bodies of the patients. There is no combined hybrid disease and it is only due to Woodward to say that he did not recognize a hybrid disease. Typho-malaria is a villainous name and should be banished from our vocabularies and no doctor should ever use it, particularly to his patients. It gives a man a wrong sense of security and the doctor wastes a lot of good medicine, a lot of quinine, for instance, because he thinks there is some symptom that points to malaria. I am happy to say that cases of typho-malaria are disappearing slowly from the health reports; they ought to be banished entirely. Chills, as I told you, occur frequently at the outset of a disease and they may occur throughout the course of a typhoid fever. The state boards of health hereafter should return to every physician who sends in a diagnosis of typho-malaria his blank and ask for something better. It is too late in the day, gentlemen, to make that diagnosis.—Dr. William Osler.

Digitized by Google

Western Medical Review.

LINCOLN, NEBRASKA.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

GEORGE H. SIMMONS, M. D. . . . . Editor.

Original articles, news of interest to the profession, clinical reports, and society proceedings solicited.
Illustrations, when necessary to elucidate the text, will be furnished when author supplies drawings.
All communications to this journal must be contributed to it exclusively. Anonymous communications will not be noticed.
Reprints furnished at cost.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance.....$1 00
Single copies..... 10

Address: WESTERN MEDICAL REVIEW, LINCOLN, NEBRASKA.

Entered as second-class mail matter at the Lincoln, Nebraska, post-office.

LINCOLN, NEBRASKA, DECEMBER 15, 1897.

ONE of the important societies of the west is to meet in Denver on the 28th and 29th inst. The Western Surgical and Gynecological Association should have the support of all western physicians, and we doubt not that the meeting in Denver will attract a large attendance. The local physicians are preparing to make the meeting a success socially, and the large list of papers by the leading surgeons and gynecologists of this part of the country ought to well repay any sacrifice that our readers may have to make to attend. A banquet will be tendered the visiting members by the physicians of Colorado.

TREATMENT OF SARCOMA WITH COLEY'S FLUID.

The subject of treating sarcoma with the erysipelas-toxin as advocated by Dr. Coley seems to have been dropped by the physicians of this country. It has been tried and found wanting. Not so abroad, however. At the meeting of the Medical Society of London, November 8, Mr. Mansell Moullin showed two cases of supposed sarcoma in which he had used Coley's fluid, the ultimate result in each case being a cure. Mr. Moullin admitted that it was impossible to be sure of the diagnosis of sarcoma, but he had no doubt that these two were true sarcomatous growths. The first case was a man, 28 years of age, who was admitted to the hospital in November, 1895, for a swelling in the groin of some weeks' standing. The swelling was in the right iliac fossa, extending deeply on the inner side of the pubes. It was firm, not fluctuating, and beneath the iliac vessels. There were four enlarged glands near it. The patient appeared ill and had a fluctuating temperature. On December 4 half a minim of the fluid was injected, and the temperature next morning was 100.8°. That afternoon one minim was injected without result. But the temperature went up to 102° on December 6 and 7. After this an injection was made every second or third day, gradually increasing the dose till six minims were reached. The results of these injections varied, some being followed by rigors, others not. The injections were discontinued at the end of February, as they ceased to have any effect. The result was decidedly beneficial in one way, for the patient's weight increased from 9 st. 12 lbs. (138 lbs.) to 10 st. 5 lbs. (145 lbs.). The tumor increased rapidly at first, the skin becoming red and tender. By the middle of January the tumor was smaller, and the glands less apparent. At the end of the month it became larger again, and appeared acutely inflamed. At the beginning of March it shrank and grew hard and irregular in outline until there was but little of it to be felt. Since that time it has scarcely altered.

The other patient was a man 48 years old, admitted November 10, 1896, for an abdominal tumor. The left flank was occupied by a large, irregular swelling, elastic, hard, not fluctuating, not connected with the skin or muscles. Below it descended into the right iliac fossa, above it reached under the false ribs, while in front it came nearly to the median line. It rapidly increased in size. On December 14 the first injection was made, a half minim being the dose. The temperature rose to 100°. The injections were given as in the other case. On December 9, after four minims were given, the patient had a rigor, and also on January 24, after a dose of seven minims was given. On that evening the temperature rose to 101.8°, and next day it was 103.6°. For a fortnight after the temperature kept above normal and no more was given. In January the tumor became acutely inflamed, but this subsided and it gradually shrunk until it could be scarcely felt. The patient left the hospital in March, stronger and stouter. Dr. Moullin said that the remedy was attended by some danger, and in one of his other cases the patient, who was in a weak condition, died shortly after the second injection. He had tried this treatment in nine cases with one death. One had refused further treatment after two or three injections; two were still under treatment; in three the growths had disappeared, and in the others, although they did not disappear, they became greatly modified, and for a time diminished in size. He did not know whether the fluid acted as a specific or merely by provoking inflammation.

In the discussion following Mr. Watson Cheyne said he had treated successfully two cases with the fluid, and in one the growth was certainly sarcomatous. Dr. Coley's statements, he said, could be relied upon. Dr. Coleman spoke of the results of the injection of the fluid in two cases which had died of some intercurrent disease. The autopsy revealed in one case a large area of softening in the interior of the tumor, while in

Digitized by Google

the other there were cicatrices which probably marked the site of past inflammation.

Under these circumstances it is a question whether this mode of treatment ought not to have further trials in the United States. The treatment is a radical one to be sure, but the disease in some cases must be reached in some such method or not at all. Coley has published accounts of at least twenty well authenticated cases, in which the tumors had disappeared.

PRESENTATION OF SENSE.

All we know of things comes through our five, or possibly six (muscle) senses. Consequently the physiology of sensation becomes interesting alike to those who have to do with things and to those who have to do with the comprehension of things, or with the more speculative side of mind; that is, to the physicist and to the metaphysician. As for the new psychology, sensation is the rock upon which it is built. Amid all these interests it is to physiology that we must look for first facts. Upon her lays the task of furnishing data, not only for the sciences referred to, but more than all to physicians. It is much to be regretted that no branch of physiology is so little advanced as is the physiology of the nervous system.

In the matter of presentation of sense the physiologist finds himself apparently before the traditional gulf that confronts every investigator, in what field soever, if he but push his investigations far enough. This chasm has hitherto only been filled by conjecture. For instance, the prima donna, separated from her auditor, say by a hundred feet, sets in motion certain vibrations; the auditor enjoys an intellectual pleasure in an aria from Il Trovatore. From the moment the waves reach the endorgans of hearing until the aria becomes an intellectuality—a conscious cerebration—there is, in our knowledge, an immense gap.

A distinguished professor, Dr. Ernst Maich, of Vienna, is out in a book in which he seeks to bridge the gulf existing between the stimulus and the sensation with monistic philosophy, which teaches that things or their phenomena, as color, form, sound, and the like, are but an extension of the ego. The Kantean doctrine, of a thing in itself, is denounced as a monstrous notion. A color, says the monist, is a physical object only as long as we regard its luminous source. Considering, however, its dependence upon the retina it becomes a physiological object—a sensation. The difference in the two domains being not in the subject investigated, but in the direction of our investigations.

Bodies do not produce sensations, but sensations make up bodies. In other words, all we know of things is their elements or properties (phenomena), but phenomena are sensations and belong to the ego and not to the thing. Hence if the phenomena belonging to the thing be all taken away, how can something still remain? This protean supposititious "thing" monistic philosophy, by an extension of the ego, does away with.

SOME NEW POINTS IN PHYSIOLOGY WHICH BEAR UPON DIABETES.

No field of intellectual activity is without its leaders. In many branches of learning a writer may be authority for generations, but in medicine it is different. Here a dead author ceases, almost at once, to be regarded as authority. Indeed, the living only maintain their place by ceaseless activity. In this way, however, they may long retain their leadership. More than a decade ago, when a student in London, we found Dr. Pavy's ward at Guy's filled with diabetics who had found their way there by reason of the high estimation in which the attending physician was held by the profession; and this on account of his superior knowledge of this particular ailment. A recent number of the London Lancet (November 20, 1897) contains an address on diabetes delivered by Dr. Pavy before the Royal College of Physicians, London. A life spent in the scientific study of the subject, both in the laboratory and by the bedside, entitles the author to a hearing. Our limitations, howevere, will permit but an allusion to a few points that are new in the physiology of the carbohydrates.

If disease is a deviation from health, we can only recognize abnormal processes by knowing the normal. But in diabetes, as in nervous diseases, it is the conditions belonging to health that are most difficult to get. So much obscurity, indeed, has surrounded the disposition by the system of the sugar-making foods that their physiology has been little understood. That saner ideas of diabetes might be had, the author has diligently sought to settle the matter by answering the question: How is carbohydrate material disposed of in the animal economy? It has been the teaching of physiology that the blood could contain of sugar 2.50 parts per 1,000 without its making its appearance in the urine, but if more than this amount was present in the blood, then sugar would be found in the urine. Improved chemical facilities show that normal blood contains of sugar about 1 part per 1,000, and that even with this small amount the straining process goes on in the kidneys, and that sugar is an ingredient of normal urine. So that in the elimination of sugar from the blood the kidney possesses no tolerating capacity; therefore the old theory that the liver is a glycogenic storehouse for the system, as well as the doctrine that sugar undergoes direct oxidation in the tissues, must fall to the ground.

Pavy has shown that in a diabetic, when on an exclusively animal diet, thirty-seven grammes of sugar

Digitized by Google

was passed in twenty-four hours, while the same patient, on a full carbohydrate diet, passed 685 grammes of sugar in the same time. This amount of saccharine substance could not pass in the tissues without revealing its presence in the urine. If the blood passed through the systemic capillaries before it reached the kidneys, then the sugar might be oxidized without being eliminated. The blood, it should be remembered, that goes to the systemic capillaries is just the same as that which goes to the kidneys, but as these have no tolerative capacity, sugar in the blood would at once declare itself in the urine.

Again, modern physiologists are agreed that the amount of sugar in the blood of healthy animals is not in proportion to the sugar-making foods ingested. No matter whether carbohydrates be eaten or an exclusively animal diet, the amount of sugar in the blood of normal animals remains about the same, that is, 1 to 1,000. All this is interesting, but it leaves unanswered a most important question, What becomes of the carbohydrates? If they are not contained in the blood or stored in the liver, where are they? It is well known that they are susceptible of being transmuted from one to the other by increased or deccreased hydration. Let the author speak for himself:

"Now, by the agency of protoplasmic action or the power possessed by living matter, carbohydrate is (1) transmuted to a lower form of hydration, (2) transformed into fat, and (3) synthesized into proteid. All these operations can be definitely shown to take place in the simple cell organism of yeast as the result of the power with which its protoplasm is endowed, and the power here represented is nothing more than the common property possessed by protoplasm in general of both kingdoms of nature. Whilst ferment action hydrates and breaks down, protoplasmic action dehydrates and builds up, and it is by the influence of this latter power, I contend, that the carbohydrate naturally becomes disposed of in the system instead of by ferment action leading to the production of sugar that is fictitiously assumed to undergo oxidation whilst traversing the systemic capillaries."

In diabetes, however, the carbohydrate matter ingested fails to undergo proper transformation and passes, as sugar, through the system to the kidneys, which eliminate it just as they do in health, the difference in their work being in quantity and not in kind.

Notes and News.

DR. E. C. KIMBALL, of Colorado Springs, died October 28.

THE Denver Journal of Homeopathy has dropped its old name and now calls itself The Critique.

DR. E. L. BRIDGES has removed from Omaha to Wausa, and Dr. M. B. Croll from Fremont to Herman, Neb.

DR HARRISON ALLEN, emeritus professor of anatomy in the University of Pennsylvania and a voluminous medical writer, died suddenly November 14, at his home in Philadelphia.

THE Laryngoscope is authority for the statement that at the last census there were 41,283 deaf and dumb persons in the United States, whereas there were but 18,150 two decades before.

MEDICAL colleges in Pennsylvania now have to give a bond of $1,000 as a guarantee that they will not dissect human bodies unless they get them through the regularly appointed legal channels.

THE Antikamnia Chemical people have sent out a very unique and handy pocket case, which, while primarily intended to advertise their product, is a very convenient thing to carry in the pocket.

ONE physician is reported to have made a fortune in the Klondike gold fields, and made it in his profession, too. He hailed from the malarial region of Louisville, Ky., and took with him to the far north a good stock of quinine capsules. These he sold at $5 a piece.

THE total number of yellow fever cases in the United States, according to the marine hospital service reports, was 4,289; 446 of these were fatal, or an average of a little more than 10 per cent. The highest death rate was at New Orleans, where it was 14⅓ per cent.

THE new order of things calls for the surgeon to wear gloves while operating. Wolfler employs the ordinary leather Austrian military glove made of leather, which he keeps in a 3 per cent. carbolized glycerine. He advises their use in vaginal and rectal examinations.

SIX physicians will be in the general assembly of Iowa this winter. These are Dr. J. R. Gorrell, of Jasper county; Dr. Samuel Druet, of Marion county; and Dr. J. M. Emmert, of Cass, in the senate; Dr. D. H. Bowen, of Allamakee; Dr. P. L. Prentis, of Ringgold; and Dr. J. R. Boyd, of Shelby, in the house.

ACCORDING to the Ohio Medical Journal a death recently occurred in Cincinnati from chloroform and a tragedy nearly resulted from an infuriated mob that threatened to take vengeance upon the three physicians who were present. The autopsy revealed extreme fatty degeneration of the heart and kidneys.

CORRECTION.—In the 10th line of the editorial on The Transmission of Tuberculosis, in the November REVIEW, read "current" opinion in place of "correct" opinion. If in the 5th line on page 352 the word "yellow" were substituted for "typhoid" it would be more in accord with what we intended to say.

In our report of the meeting of the Utah State Medical Society on page 257 of the last number of the REVIEW, the title of Dr. Hardy's paper should be "puerperal" and not "perpetual" insanity. This paper will be published in the January number of the REVIEW.

THE joint committee appointed by the regular, eclectic, and homeopathic state societies of Illinois held a meeting in Chicago on November 23. A sub-committee was appointed to draft a medical practice bill

Digitized by Google

to be presented to the next regular session of the legislature. The bill will be presented to the joint committee as soon as it is drafted.

A new weekly medical journal is to be started in Philadelphia in January. It will be backed by a company organized for the purpose and to be known as the Philadelphia Medical Publishing Company, with a capital stock of $30,000, in shares of $10 each, paid up and non-assessable. Dr. George M. Gould will be editor, and the price $3 per annum.

Dr. Thomas W. Evans, the "American dentist," of Paris, died suddenly of angina pectoris, on November 14, aged 75. His great wealth was obtained, to a great extent at least, by being a friend to his own country and investing in American securities when they were at a low ebb. He is reported to have been worth $30,000,000, most of it being left to charitable institutions. He was the official dentist to nearly all the royal families of Europe.

The poorest surgeon is he who begins his work as a surgeon, for he inevitably magnifies his field to the detriment of that of the physician, frequently when his comrade would have been able to bring the case to a successful conclusion. Often, if the surgeon has but the patience to hold his hand, he will find that there are means and measures at his command, not strictly surgical, which will accomplish the purpose.—Dr. William M. Polk.

Massachusetts has debarred physicians of Rhode Island from practicing in their state without first registering. This is very hard on those who live on or near the border. The state board of health of Rhode Island has now retaliated, and Massachusetts physicians will now have to register in Rhode Island before they will be permitted to practice there. Which all goes to show that reciprocity between different states is a necessity.

Dr. Mark H. Lackersteen, of Chicago, died December 7. Dr. Lackersteen was one of the well known physicians of Chicago, and was one of the leading members of the staff of the Post-Graduate Medical School. He held the M. R. C. S. degree of England and M. R. C. P. of London. Following his dying request, his friends will have the body cremated. Dr. Benn P. Reynolds, another of Chicago's well known physicians, died in the Presbyterian Hospital of endocarditis on December 8. He was 65 years old.

Dr. Harold N. Moyer, of Chicago, editor of Medicine, was shot by footpads at about 7 o'clock on the evening of December 9. He was walking up the street, and noticing that he was being followed increased his pace. The would-be robbers, however, quickened theirs too, and finding it was either run or fight the doctor suddenly turned around and struck one between the eyes, felling him. The other shot at the doctor, but the latter struck the arm of the assailant and the bullet entered the fleshy part of the thigh. Others coming up the robbers fled, and Dr. Moyer was taken to the Presbyterian Hospital, where Dr. Stamen removed the bullet. Dr. Moyer is doing nicely.

The state board of health of New York will make antitoxin the subject of examination after the first of January. Two special examiners have been appointed, and these will immediately notify all serum manufacturers to have their establishments and products ready at all times for examination. When it is remembered that impure antitoxin is a fatal remedy, the action of the New York board is taken none too soon. It is a too important remedy to be left to the caprice of any and every one who may take up the manufacture simply to make money out of it. Still better would it be if, instead of leaving it to the states to look after, there could be a national supervision.

Death of Dr. P. W. Hays.—Dr. P. W. Hays, of Falls City, Neb., died at his home November 2, aged 49 years and 10 months. His death was the result of pneumonia. Dr. Hays was born in Pennsylvania in 1848, and graduated at Jefferson Medical College in 1879. After graduation he came to the west and settled in Humboldt, Neb. He married Miss Kate Unland, of that place, in 1880. In 1892 he returned to Pennsylvania and settled in Ford City. But only remained there a year. He returned to Nebraska and settled in Falls City, where he built up a good practice and enjoyed the esteem and respect of all who knew him. He leaves a wife and three children.

Langsdale's Lancet, in speaking of the new medical schools of Kansas City, says that one of them was closed by the sheriff because it was not able to pay for a desk. This information is given for the benefit of the Kansas City Medical Index, which paper had said that it was a well equipped school. And now the Lancet informs us there is another one started. This one is located over a store, with less room than some doctors use for offices. "One of the prime promoters, and an officer of the faculty of this latest acquisition, is not even a graduate in medicine, and was recently arrested for alleged irregularities, at the instance of the city board of health. Some of the faculty are notorious advertising quacks, some call themselves homeopaths, some eclectics, others regulars, while a few say they embrace the 'whole shootin' match.'"

The Ohio Medical Practice Act.—The medical examining board of Ohio has met with all kinds of opposition, but by persistent work it has about conquered all opposition. One case was carried to the supreme court of the state on a test of the constitutionality of the law. The points ruled upon by the court are as follows:

"1. The power conferred on the state board of medical registration and examination by the act 'to regulate the practice of medicine in the state of Ohio' is administrative in character, and not judicial within the meaning of section 1 of article 4 of the constitution of the state.

"2. The act is prospective in operation, and in no respect obnoxious to section 10 of article 1 of the federal constitution, which forbids the enactment of ex post facto laws and bills of attainder by the states.

"3. It is competent for the state, under its power to provide for the welfare of its people, to establish need-

Digitized by Google

ful regulations and impose reasonable conditions calculated to insure proper qualifications, both with respect to learning and moral integrity, of persons desiring to engage in the practice of medicine in the state, and require compliance therewith by such persons before they shall be permitted to practice within the state. The regulations adopted by this statute are of that character, and do not infringe upon those privileges and immunities guaranteed by section 2 of article 4 of the federal constitution to citizens in the several states, nor those secured to citizens of the United States by the 14th article of amendment of that constitution."

"OMAHA'S QUEER EPIDEMIC."—Under this heading, with the supplementary one of "More than 10,000 Persons Afflicted with a Strange Skin Disease," one of the daily papers lately published a dispatch from Omaha concerning an epidemic skin disease that was said to be puzzling the physicians of that city. How a newspaper correspondent delights in anything that puzzles the doctors or is imagined to puzzle them! Nothing ever puzzles him. This particular wonder-monger says: "The disease develops in small eruptions which cover the body. The eruptions are highly inflamed and finally scale off, like scurvy." We are all familiar with the frisky way in which scurvy scales off, and of course we cannot suggest that there has been any confounding of scurvy with scurf. "Every barber shop in the city," says the dispatch, "is provided with a salve which is designed to allay the inflammation." We condole with our Omaha brethren, then, since they have the barbers as well as the counter-prescribers to compete with.—New York Medical Journal, November 27.

THE VALUE OF HYDROCHLORIC ACID IN SCIATICA DISCOVERED BY ACCIDENT.—A somewhat remarkable instance is recounted in the Semaine Medicale of a patient having arrived at a successful method of treatment for himself by the merest accident. A man who had suffered for many years from sciatica was treated in an Algerian hospital by means of hypodermic injections of salt and water, but without success. After he had left the hospital he thought that probably the salt solution was not strong enough and that a stronger preparation might be successful. He therefore procured some "spirit of salt"—hydrochloric acid—and instead of injecting it, painted it on the skin. In a day or two his long-standing trouble had vanished. Sometime after he told the physician who had treated him—Dr. Bourlier—his experience and this gentleman employed it in several cases with success each time. He told one or two of his confreres of his treatment and they too tried it with success. The procedure is simple. Strong hydrochloric acid is painted over the painful part of the nerve, three or four coats being applied. The part is then covered with aseptic cotton. The application causes pain, but not severe. In a few minutes the parts become red and hot and bullæ occasionally form. These disappear in a few days. The patient usually feels relief from the first application. The second application can be made in twenty-four to forty-eight hours, but of course not where bullæ have formed. A third application must not be made for several days, as there would be danger of producing sloughs. Dr. C. Gennatas, of Montpellier, has published a report of twelve cases of sciatica, all of which were completely relieved by this means.

PHYSICIANS EXONERATED.—The Nebraska supreme court has just handed down an opinion in the case of Van Skike vs. Potter, the latter being Dr. D. D. Potter, of Seward. The case was a suit for damages for malpractice, the injury being a fracture of the patella, which resulted in ankylosis of the knee joint. There have been two trials. In the first the jury disagreed. In the second the jury found for the defendant, Dr. Potter. On this verdict the plaintiff carried the case to the supreme court, which has just decided for the physician. From the opinion handed down we select the following:

"The evidence examined and held to sustain the findings of the jury that defendants did not contract with plaintiff to effect for him a permanent cure; did not contract to visit and treat him until he was cured; that defendants were not guilty of negligence in the treatment given the plaintiff, nor in adopting and pursuing the method of treatment followed by them.

"2. The law does not require of a surgeon absolute accuracy, either in his practice or judgment; it does not hold him to the standard of infallibility; nor require of him the utmost degree of care or skill; but that in the practice of his avocation he shall exercise that degree of knowledge and skill ordinarily possessed by members of his profession.

"3. A petition alleged that defendants agreed to visit and treat plaintiff until he recovered. The answer was a general denial. The defendants were permitted to testify that, at the date of their last visit to plaintiff, they informed him that they should not return, unless they should be requested so to do; that they received no such request and did not revisit plaintiff. Held, that this evidence was relevant under the pleadings.

"4. In a suit against a surgeon for damages for alleged negligence in operating upon and treating plaintiff's fractured knee cap, the district court refused to permit persons called as jurors to answer on their voir dire examination whether they were members of any church organization or secret society. Held, that it does not appear, nor can it be inferred from any fact in the record, that the district court abused its discretion or erred in its ruling in this matter.

* * * * * * * * * *

"7. In a suit for damages against a surgeon for alleged negligence in operating upon and treating plaintiff's fractured knee cap, text-books on surgery, though standard authority on the subject, cannot be read to the jury as independent evidence of the opinions and theories therein expressed or advocated."

COCAINE poisoning is best treated by the recumbent position, amyl nitrite, and aromatic spirits of ammonia in water slowly sipped.

Digitized by Google

Correspondence.

THE IMPORTANCE OF DIAGNOSIS IN TUBERCULOSIS.

Editor Western Medical Review: The very excellent and interesting articles on tuberculosis in the recent number of the REVIEW calls to my mind a case that recently came under my observation and treatment. The case is interesting from the manner of infection and also on account of the obscure and ill-defined symptoms that preceded the outbreak of the symptoms, plainly proclaiming a manifest tubercular invasion. The importance of using every available means for diagnosis in these obscure cases cannot be too greatly urged. In the chronic cases it will add to the patient's prolonged existence and comfort, and in acute cases of rapid and violent infection there is immense satisfaction in making an early and positive diagnosis.

Anna M., aged 14 years, of healthy parentage and robust constitution. One sister died of lung tuberculosis in April, 1895. This sister was also of excellent health and fine physique until one year previous to her death, which occurred at 24 years. This subject was without doubt infected while working as a missionary in the slums of one of our large cities. She made a visit home in December, 1894, when an examination revealed tuberculosis of left lung. She remained home only one week. She came home again in March, 1895, and died at home on April 6. At this visit home her sister, Anna M., came into the room, embracing and kissing her sister repeatedly. Other than this the strictest precautions were taken to prevent infection by any member of the family. Anna M. had always been a strong and vigorous child, well developed, and inclined to be fleshy. Menstruation was established at 13 and maintained with regularity. She first complained of blurred vision, headache, and periodical hemianopsia. This was in June, 1895, three months after the probable infection. An oculist found fundus normal and no error of refraction. In August she complained of left ankle, pain in walking, and weariness on coming home from school. The parents thought the ankle sprained. In September she complained less of ankle, but now the hip joint was affected. Examination showed the slightest tenderness on pressure over hip joint and on outside of ankle joint. No swelling and no rise of temperature. Is now easily wearied and disposition slightly irritable, in striking contrast to former buoyancy of spirits. Has periods of headache and some derangement of vision. In December she complained of right wrist, certain movements causing pain. In February she was brought to me on account of ankle, hip, and wrist. Has been menstruating regularly since one year ago. Temperature is normal, pulse slightly accelerated, absolutely no cough. A thorough examination of chest shows diminished resonance and slight bronchial breathing over left apex. Appetite good and sleeps well. March 15 she began to cough and expectorate a bloody sputa. Examination shows congestion of entire lung, crepitation universal, and moderate fever. Microscopical examination shows tubercle bacilli in abundance. An unfavorable prognosis was given, which was soon verified in the development of symptoms of acute tuberculosis, meningitis, vomiting, blindness, and local spasms, death occurring on May 21, 1896. Although the patient was seen only a few times prior to the development of acute symptoms, yet the observations and examinations were searching and no evidence of lung infection could be detected until February, 1896, and in one month's time, possibly by the breaking down of a tubercular gland, the entire system was most thoroughly seeded.

Pawnee City, Neb. A. B. ANDERSON.

"SHALL WE LET DOWN THE BARS?"

Editor Western Medical Review: I am sorry to take so much space, but the questions of Dr. Sutherland could hardly be answered in less, and indeed should have much more. His first demand is: "I want his definition of homeopathy."

"A system of medicine founded on the principle that like cures like." (Standard Dictionary.)

The homeopathic profession at large interpret this to mean that homeopathy does not necessarily signify the size of the dose, but rather a law of prescription; i. e., that medicines shall be prescribed in the smallest doses which clinical experience has shown will remove pathological conditions which are similar to those produced in a healthy human being by said remedy when given in material doses for the purpose of securing a proving of said remedy.

Experience has determined that in most cases the curative dose is the "so-called" minimum dose, but this is not necessarily or always true. Homeopathy is a law of prescription, and only a law of dose so far as the minimum dose that cures the similar pathological symptoms without inducing in turn drug symptoms is the proper dose.

Second—"I want him to tell us to what extent hypodermic medication is used in his school, and by this method what is the remedy and what the dose for a severe pain?"

As the homeopathic school is never ashamed of its methods and never has anything to conceal, I cheerfully confess that we are often placed in the position to which I believe Dr. H. C. Wood once confessed by saying: "That whenever we use morphine to relieve pain we confess our ignorance." In other words, it is in such cases used merely and purely as a palliative. To its use we have an equal right to the rest of the world, as its use is entirely empirical and does not belong by right of primogeniture to any school. We are not proud that we have to use it, nor are we ashamed to confess facts. The necessity lies not in the imperfections of our law, but in our imperfect mastery of it. That we do not have to use morphine as commonly as the so-called regular school I am sure; that we may some day be able to discard it entirely except in cases of actual traumatic suffering, as, for instance, the passage of a calculus or effects of recent injuries, either of accident or surgery, I believe.

Third—"Is mass. hg. and hg. chloridum mite in five and ten-grain doses compatible with the teachings of his school?"

Digitized by Google

In some extreme case some member of our school may use such means to remove from the intestine a foreign substance, i. e., as a vis a tergo, or possibly in some attempt to render the alimentary canal aseptic. This is, however, not a common practice of members of the homeopathic school, and no one in candor will attempt to make a possible exception a rule, and yet if one should use these means and yet in nine-tenths of his work make absolutely homeopathic prescriptions, neither you nor I have a right to accuse him of dishonesty or to doubt his honest belief in the homeopathic methods he does use. We might possibly regret that he had not carried his homeopathic studies further so that it might not be so often necessary for him to resort to other methods than the only one that cures "tuto, cito, et jucunde."

Fourth—"Is the writing of prescriptions in which the different preparations of mercury, quinine, the iodides, and cuti cura if you please, are designated in large doses in true accord with the homeopathic principles?"

As I have previously stated, the dose does not necessarily constitute homeopathy, and until the dose in which they were used and the affections for which they were prescribed are defined I cannot answer in regard to the mercuries and iodides, but I can say that many of the best uses of the mercuries originated with the homeopathic school and are strictly homeopathic in origin and principle, as for instance, merc. viv. and cor. in dysentery, and merc. proteid. and biniod. in tonsillitis, scarlet fever, and diphtheria. Quinine may be used by any school in certain forms of malaria purely as a germicide to destroy the bacilli of Laveran, though I am pleased to say, as a rule, this is unnecessary in homeopathic practice, as it is a well recognized fact that pathogenic germs will not live or in any case exercise a detrimental influence except where proper soil of cultivation is found, and the human system is in most cases rendered immune to the malarial affections by strictly homeopathic prescriptions. It may interest you to know that the origin of homeopathy was in recognition by Hahnemann of the fact that small doses of cinchona cured conditions similar to those it produced in toxic doses. Cuticura is a proprietary article and not in place in any school.

Question five is already answered in the previous lines.

Sixth—I never speak of your school in other than respectful terms, and there are in it many men whom I respect and honor and who, I trust, credit me with the same honesty of purpose that I accord to them. I can do no better than repeat the words of Dr. McClelland, the president of the American Institute of Homeopathy, in his address at the fiftieth meeting of the institute in Denver in 1894: "Having devoted itself to the collateral branches, it has brought to bear the keenest methods of research and developed an array of facts that have greatly added to our sum of knowledge. We cordially join hands with the old school in all that tends to the extinction or prevention of disease. The old school is essentially a school of palliatives, a school of relief for to-day. Homeopathy, per contra, is a system of cure."

Seventh—No, sir! I never evade. I know of men of both schools who do this, but it is the exception, not the rule, and I am proud in the knowledge that the great majority of the medical profession of all schools rank high in honesty, integrity, and noble manhood.

In your resume, or voluntary answer to your own questions you make accusations to which my reply is the old saying, "A gentleman will not insult me, no other can."

We have our post-graduate schools of a high order in New York, Philadelphia, Chicago, and other cities.

That our men often go to your schools to study pathology and mechanical surgery I am glad to recognize. That they go to study treatment I doubt. This attendance and the possession by our profession of many works of the better men of your school indicates a breadth of character and culture that is an honor and not a disgrace, and inasmuch as we do not claim to differ from you in pathology and surgery, but only in treatment, it in no way militates as an argument against us. That you do not possess our works, and consequently know little of our literature or our methods, should be sufficient reason why you should not attempt to deny that of which you admittedly know little or nothing. By us the names of Hahnemann, Hering, Jahr, Boenninghausen, Jousset, Dunham, Farrington, and so on, are as honored as those you mentioned are by you, though we cheerfully admit the work done by those you name and with you honor them for it. As to the hospital in Philadelphia, until I know the name of the hospital and time of the occurrence I cannot answer it, but the records of homeopathy, standing side by side with those of others in many hospitals, is open to your inspection, and I invite you to it. * * * B. F. BAILEY.

Lincoln, Neb.

Editor Western Medical Review: I appreciate the favor you confer upon me in sending me Dr. Bailey's manuscript, and I cheerfully comply with your request that I make my reply brief, for I realize that this discussion is occupying space in your excellent journal which could be put to much better use, and that it is not profitable, as I am well aware that "a man convinced against his will," etc. Indeed, there is but little need or excuse for me to say anything, for the doctor's paper contains so much good argument—for our side—I would be perfectly willing to let the case go to the jury without another word, but he has furnished me with so many points so easy of attack that the temptation to notice a few of them is too great to be resisted.

His answer to my first question, "like cures like," is only a part of the truth. He realizes this, as is proven a little further on, when he says "It does not necessarily signify the size of the dose." Now, any one who knows anything about homeopathy knows that small, infinitesimal doses is one of the cardinal principles, equal in importance and as dear to the homeopathic heart and the homeopathic brain, as is similia similibus curantur. That the writings of all their standard authorities recommend, advise, emphasize, and insist upon small doses, the thirtieth dilution being the favorite among the most, and which is so small as to have no existence except in a mathematical calculation,

Digitized by Google

and since he quotes as patron saints of his school Hahnemann, Herring, Jahr, and others, we will accept them and very briefly refer to them. In his Organon, English edition, page 289, Hahnemann says: "The very smallest, I repeat, for it holds good and will continue to hold good as a homeopathic therapeutic maxim, not to be refuted by any experience in the world, that the best dose of the properly selected remedy is always the very smallest one in one of the high dynamizations (X or 30th dilution), as well for chronic as acute diseases, a truth that is the inestimable property of pure homeopathy, and which as long as allopathy (and the new mongrel system made up of mixtures of allopathy and homeopathic processes is not much better) continues to gnaw like a cancer at the life of sick human beings and to ruin them by larger doses of drugs will keep homeopathy separated from the spurious arts as by an impassable gulf."

Then in Lee's Homeopathy, page 5, Hahnemann says: "In fact, dilutions of silex to the billionth or trillionth degree produce symptoms much too violent; that the sextillionth degree may be commenced with, but this only suits robust persons. In irritable subjects it is prudent to use only the decillionth dilution." Silex is flint rock and the Indians have used it with deadly effect, but not in the "decillionth dilution."

Jahr, in his Manual of Homeopathic Medicine, vol. 1, page 532, says: "Silex, commonly used in the 30th dilution, produces 372 different symptoms, many of them lasting seven or eight weeks." Now, does Doctor Bailey, when he says and repeats "The dose does not necessarily constitute homeopathy," wish to be understood that he is an advocate of the mongrel system? Or that the homeopathy of to-day is not the homeopathy of Hahnemann? If so, and he claims that those men are as honored by his school as are those whose names I gave are honored by ours, then in the name of the continental congress and the Nebraska state legislature for what are they honored? Simply for their vagaries, beyond the shadow of a doubt. Returning to the principle that he does acknowledge (like cures like), for a severe pain why not apply the cat-o'-nine-tails, and for "the removal from the intestine of a foreign substance," for instance a calculus, why not send down a little silex to "cure" the stone. For an aggravated case of constipation a dose of alum or tannic acid. For a man who is suffering the pangs of hunger lift the lid of the soup tureen and direct him to "smell once," for such is the doctrine of Hahnemann. Note his answer to my second and third questions: "That we do not use morphine as commonly as the so-called regular school, I am sure," et seq., and in regard to mass hg. and hg. chlor. mite, "This, however, is not a common practice of the members of the homeopathic school." In answer to both of these assertions, all of the homeopaths I ever knew used opium and mercury in their various forms just as commonly, just as often, and in just as large doses as any of the regular physicians, and the only way in which I can harmonize the doctor's statements with my experience is to conclude that thus far I have become acquainted with only the exceptions, and no doubt nine-tenths of the readers of the REVIEW are now thoroughly convinced that such has been their great misfortune also. If Dr. Bailey will tell me where I can find "rules" used by the representative men of his school, those who are not writing books on homeopathy, but who are doing a general practice, and if at the same time he will secure for me the permission to inspect their pill bags and prescription files, and then I do not find what I look for, I will come out openly and cry "Peccavi. Tuto, cito, et jucunde." And instead of killing the doctor with a decillionth of a drop of sun dew when I meet him in Omaha at our next state society meeting I will put a new glove on my hand in order not to contaminate him and offer it to him in the warmest cordiality.

In my sixth question, and all that immediately follows, the "you" is plural, which is plain to be so understood by reading a little farther, where I say, "You pose as homeopaths," etc., but my injured, though not insulted, friend appropriates it all to himself and says, "I never speak of your school in other than respectful terms. * * * I can do no better than repeat the words of Dr. McClellan. * * * We cordially join hands with the old school." There it is. "Old school." Then continuing, "The old school is essentially a school of palliatives, a school of relief for to-day. Homeopathy, per contra, is a system of cure." Ahem! No doubt it is this utterance of Dr. McClellan's that is causing some members of the "old school" to fall over themselves to "join hands." Shall we jine?

But I have overlooked one item. After his little talk on how "some day, some time," they are going to "cure" "malarial affections by strictly homeopathic prescriptions," he very patronizingly says: "It may interest you to know that the origin of homeopathy was in the recognition by Hahnemann of the fact that small doses of cinchona cured conditions similar to those it produced in toxic doses." Thanks, doctor, for this interesting (?) knowledge, but I have known so long and so much that it was the eating of Peruvian bark that so beaddled Hahnemann's brain that it caused him to write his Organon, and to change his place of residence twenty-four times within twenty-eight years, that it is no longer interesting. Every cyclopedia that says anything about him, and every babbling baby writer of homeopathy repeats this Peruvian bark story. But until I read your manuscript I did not know that cinchona was toxic; but it may interest you to know that the word "cure" is derived from a Latin word which signifies to take care of. If a prescription call for cuti cura is a curi-osity, we have just such a curi-osity on file in this city, and written by a man who has no other diploma than one from a homeopathic college.

Grand Island. J. LUE SUTHERLAND.

Lack of space has compelled us to cut down both of the above letters. This discussion will now cease.

DIURETIC PILL.—The following pill is highly recommended in cases of dropsy of cardiac origin:

℞ Scillæ, pulv.,
Digitalis, pulv.,
Caffeinæ citratis, . . aa grs. xxx.
Hydrarg. chlor. mitis . . grs. v.

M. Ft. pil. no. xxx. Sig.—One pill three times daily, after meals.

Digitized by Google

Society Proceedings.

WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

DENVER, COLO., December 1, 1897.

To the Surgeons and Gynecologists of the West—Gentlemen: The next meeting of the Western Surgical and Gynecological Association will be held in this city December 28 and 29. It is the purpose of the members of the association and of this committee to make this meeting one of unusual interest, and the papers and attendance promised indicate that the effort will be successful. This association is the surgical society of the west and must become to the west what the Southern Surgical and Gynecological Association is to the south. To this end it is desired that the many able and skilful surgeons and gynecologists of the west be brought to this meeting and enlisted in the organization for scientific work.

We are so much cut off from the scientific societies of the east and south that it is imperative that we create for ourselves a society that will foster among us the true scientific spirit and give us a better knowledge of each other.

If you are doing surgical or gynecologial work and can by any possibility arrange to be at this Denver meeting, do so by all means; it will be representative of the best and most advanced surgical skill among us and you cannot afford to be absent.

If you have a paper you would like to read, write to the secretary at once and ask him for a place on the program, but make your plans to come to Denver on the 28th of December and at least contribute by your presence to the success of the association. We need you, you need us.

A banquet will be given the visitors by the physicians of Colorado, and every effort will be put forth to make the stay of each individual as pleasant and profitable as possible.

Committee of arrangements at Denver, Colo.—W. W. Grant, M. D., chairman; C. K. Fleming, M. D., secretary and treasurer; L. E. Lemen, M. D., T. H. Hawkins, M. D.; Leonard Freeman, M. D.; W. D. Craig, M. D.; W. A. Jayne, M. D.; H. Wetherill, M. D.

CUSTER COUNTY MEDICAL SOCIETY.

This society met at Broken Bow November 16. While Custer county is on the borders of the sand hills, the physicians who practice in this county show that they are up with the times and do not propose to be left in the rear in the rapid progress of medical and surgical science. With two or three exceptions all the physicians in the county belong to the society. While Custer county is one of the big counties of Nebraska—one can ride, or walk if he wants to, one hundred miles in a straight line and still be in the county—it does not necessarily follow that it has the greatest number of doctors, or that the county society is the biggest in the state. About two dozen physicians do the practice of the whole county, and these formed a medical society for two objects, self-improvement and self-protection. They meet every two months in different parts of the county, but semi-annually they meet at Broken Bow, and make this an extra occasion. At these semi-annual meetings they invite one or two outsiders to come in and read papers. And when these outsiders come in they make it a point to treat them well. It was the privilege of the editor of the WESTERN MEDICAL REVIEW to be one of the invited ones at this meeting, Dr. J. E. Summers, of Omaha, being the other lucky one.

We were impressed with the fact that we had met a body of earnest men which met for business. They come together to learn, each from the other. The society is made up of young men and old men, all full of ambition and progressiveness, and there was no moss on the backs of any. Some of these had to drive forty or fifty miles to attend the meeting. What an example, surely, for physicians in small, thickly settled counties. These men appreciate the good there is in meeting together, and they make sacrifices to do it. It has never been our privilege to attend a meeting of medical men before where each one was as earnest and enthusiastic as the members of the Custer County Medical. They do not forget the social part either, and the banquet in the evening, with the toasts following, was thoroughly enjoyed by all present. If there could be a society in every county in every state like the one in Custer county, Nebraska, it would be a good thing for the individual member, and a magnificent thing for the profession at large.

Board of Health Proceedings.

NEBRASKA STATE BOARD OF HEALTH.

MEMBERS—Dr. C. F. Stewart, Auburn, President; Dr. B. F. Crummer, Omaha, Vice President; Dr. F. D. Haldeman, Ord, Secretary; Dr. B. F. Bailey, Lincoln, Treasurer.

THE Nebraska State Board of Health, at its meeting held December 2, granted certificates to the following:

Thomas Grant (R.), North Bend,
University of Manitoba, 1896.

Neils Christian J. Stensgaard (R.), Dannebrog,
Keokuk Medical College, 1894.

B. F. Shaw (R.), Omaha,
University Medical College of Kansas City, 1892.

Wallace L. Horn (R.), Grand Island,
Jefferson Medical College, 1895.

Wm. M. Davis (R.), South Omaha,
Missouri Medical College, St. Louis, 1884.

John P. Williams (R.), Lincoln,
North Western University (Chicago Medical College), 1896.

W. H. Horton (H.), Omaha,
Kansas City Homeopathic College, 1891.

A. A. Potterf (H.), Omaha,
Missouri Homeopathic Medical College, St. Louis, 1889.

Wesley L. Curtis (R.), South Omaha,
Rush Medical College, 1896.

W. D. Rea (R.), Omaha,
Hospital College of Louisville, 1888.

Applications of A. L. Blunt, Omaha, and Walter S. Hall, Nebraska City, held for investigation. That of

Digitized by Google

L. A. Rupert, of Omaha, graduate of the Kansas City Hospital Medical College, refused. School not recognized.

At the meeting of the board on December 2 the charges against Dr. Chas. V. Bedell were heard. The findings of the board were: "That a certificate was granted to him in 1896; that his association with Howard Paul, a man who was not even a medical student, were of such an equivocal nature as to be misleading, and that Bedell is deserving of censure for such misleading association." The board further found "that the charge of unprofessional and dishonorable conduct in the case of Mrs. Carth is abundantly proven by testimony presented, and it is the sense of this board that the attempt to demand a large fee from a poor man on the ground of a stated emergency, which all the evidence shows did not exist, is so far removed from the ordinary honorable and humane course pursued by physicians everywhere as to merit the contempt of the public. Further, that a continuation of such practice should be considered sufficient cause for further repressive action by the board."

The board took up the other specifications, one by one, but concluded the evidence did not justify revocation of certificate, but did merit censure.

Miscellaneous.

FOR ACUTE COLIC.—For the acute colic so frequently met with, resulting from indiscretion in diet, try the following:

℞	Chloroformi	ʒ jss.
	Tr. opii deodorat.	ʒ j.
	Camphoræ	grs. xv.
	Ol. cajaputi	ʒ j.
	Aquæ	q. s. ad. ℥ ij.

M. Sig.—Teaspoonful every hour or two.

DISLOCATION OF THE HIP.—Treves tabulates the methods of treatment of hip dislocations as follows: 1. Flex the thigh in adduction in the dorsal and sciatic dislocations. Flex the thigh in the abducted position in the obturator and pubic dislocation. The object of the flexion is to relax the Y ligament. 2. abduct and rotate outward in the dorsal and sciatic dislocations. These manipulations cause the head of the bone to retrace its steps through the capsular rents, and relax the short rotator muscles. 3. Extend in all cases. This causes the head of the bone to enter the acetabulum.

FOR GONORRHEA.—Dr. J. G. Mohlau, of Buffalo, writes in the New York Medical Journal: "The best of all remedial injections I have ever used in (gonorrheal) urethritis, chronic or acute, is the following:

℞	Antipyrin	10.0
	Tinct. ferri chlor.	10.0
	Trit. bene et added.	
	Aquæ dest.	q. s. ad. 150.0 to 250.0

I use a six-ounce syringe (Ultzmann), with a Mercier (coude) catheter, which I insert as far as the prostatic urethra; inject after having cleaned the urethra with six to twelve ounces of boiled water. I next inject three to four syringefuls, so that about six ounces enter the bladder, in order to prevent cystitis. It all passes out alongside of the catheter.

SUGAR IN THE URINE.—Dr. A. R. Elliott gives the following formula, devised by himself, for the testing of sugar in the urine:

SOLUTION I.

℞	Cupric sulphate	grs. xxvij.
	Glycerin (pure)	ʒ iij.
	Distilled water	ʒ ijss.
	Liq. potassæ	ad., ℥ iv.

Dissolve the cupric sulphate in the glycerin and water, and gently heat. When cold add the liquor potassæ.

SOLUTION II.

A saturated solution of chemically pure tartaric acid.

These solutions are quite stable, and keep indefinitely.

Into a test tube pour a drachm of the cupric acid solution. Boil gently over a spirit lamp. Then add two or three drops of the tartaric acid solution and boil again. The urine is now added slowly, drop by drop, until eight drops are added. If no reaction takes place by this time there is no sugar. The reaction is a yellowish or reddish or greenish-gray deposit of suboxide, which is marked and unmistakable. In a few minutes the reaction deepens.—N. Y. Med. Jour.

PSOAS ABSCESS FOLLOWING CONFINEMENT.—Dr. W. C. Wood reported a case with the following history: The patient, a woman 26 years of age, was first seen by him April 4, 1896. Health excellent until her only confinement, which occurred March 14, 1896, twenty-two days before admission to St. Mary's Hospital. Labor was difficult, forceps being used. Fever, prostration, and pain in left side of abdomen. No abnormal discharge from vagina. Left leg became drawn up. Rheumatism and hip-joint disease diagnosed by two physicians. Examination showed the patient to be thin and anemic. Abdominal tumor about five inches long by two inches broad at site of sigmoid flexure. It was hard, immovable, and tender, and could not be felt from the vagina. The uterus was large and soft. There was no peritonitis nor discharge. The joints were normal, except the left hip. Here all normal motions were present, except extension, which was limited to 130°. High enemas failed to affect the size of the tumor. The bowels were regular. Temperature, 100° to 130° F. A diagnosis of an inflammatory tumor in the psoas muscle, or intra-abdominal tumor over the psoas muscle was made. Operation, April 8. A three-inch abdominal incision was made along the outer side of the left rectus muscle. A retroperitoneal fluid tumor was found. The peritoneum was then sutured, and from the center of this incision a perpendicular incision was made toward the anterior superior spine. This incision

Digitized by Google

was carried down to the peritoneum. The peritoneum was stripped back from the iliac muscle and fascia. On reaching the site of the tumor about four ounces of pus were obtained. Free drainage by gauze and two tubes were introduced. The patient made a good recovery; temperature normal in one week. Flexion of the thigh began to subside, and the wound healed May 30. Thigh, 160°. On walking extension became normal, and on June 26 the patient was discharged, walking without a limp, and in good general health.—Brooklyn Medical Journal.

TUBERCULOSIS OF THE OVARY.—Orthmann (Centralb. f. Gynak., No. 22, 1897) endeavors to make this subject fairly clear from a clinical point of view. He has collected 177 cases. Only 57 were carefully submitted to microscopic research; of these 48 seemed to be instances of pure ovarian tuberculosis, bilateral in more than half (27) the cases. The remaining 9 were tuberculous ovarian cysts. In spite of theories of infection from the outer entrance of the genital tract, and notwithstanding the tendency of pathologists to make out primary disease where it has not been detected before, Orthmann declares that primary tuberculosis of the ovary has never been satisfactorily distinguished in woman, though Acconci and Schottlander have experimentally produced it in animals. In the 48 cases above noted as pure tubercle of a previously sound ovary, infection was traced from the fallopian tube in 26, and from the peritoneum in 22. The disease may appear as tuberculous perioophoritis, disseminated or diffused, and as miliary tubercle of the substance of the ovary (20 out of 48 cases), cheesy tubercle or tuberculous abscess. The two latter are about equally common. The former, much more frequent, may pass undetected by the naked eye, but the disease shows its features very characteristically under the microscope. In the 48 cases, tubercle bacilli were detected 9 times by the microscope and 4 times by experiments on animals. Orthmann describes four new cases under his own care. In one there was distinct tuberculosis of the yellow substance in a corpus luteum.

THE RADICAL CURE OF INGUINAL HERNIA BY AN OPERATION IN WHICH THE COURSE OF THE SPERMATIC CORD IS CHANGED.—Two Paris surgeons, M. Nelaton and M. Ombredanne, have contrived and practiced an ingenious operation whereby they divert the proximal part of the spermatic cord from the inguinal canal and cause it to run through a hole made in the pubic bone. They are thus left free to treat the inguinal canal without regard to the cord, and are able to close it more effectually than by Bassini's operation. They describe their procedure in the Presse Medicale for July 31. The anterior wall of the inguinal canal is slit up for its entire length, the hernia is reduced, the sac is resected, and the spermatic cord is freed from adhesions and from its connections with the cremasteric fibres, all the more carefully the greater may be the tendency of the testicle to hug the ring. The posterior wall of the canal is then divided on a grooved director thrust through it at the upper border of the pubic bone and passed upward to the internal ring. Then, with an instrument like a punch, a button of bone as large as a centime piece is removed from the thin part at a point not quite a third of an inch below the upper border. A chain-saw is passed through the hole, and the superjacent bridge of bone is divided at its inner edge. This bridge is then raised in an outward direction by means of a sequestrum forceps, its outer periosteal connection being preserved, and the cord is dropped into the perforation of the pubic bone, after which the bridge is replaced and secured in position with catgut sutures. The abdominal wall is repaired in two layers. The deep layer is closed with a continuous suture, of the variety known as the suture en surjet, carried from the conjoined tendon to Poupart's ligament. With the same thread the superficial layer, constituted by the aponeurosis of the external oblique muscle, is closed from below upward.

The advantages of this operation as a means of curing hernia seem undeniable. Its authors point out, too, that the altered course of the spermatic cord virtually lengthens it so as to allow of more complete descent of the testicle in cases in which that organ is unduly retracted. A disadvantage that may pertain to it is the danger of eventual damage to the spermatic cord by a growth of new bone around it. This the authors themselves have taken into consideration, and they admit that the danger may prove real. Thus far it has not shown itself in any of their seven cases, but it must be borne in mind that their first operation was performed no longer ago than on May 25. They do not think that serious compression of the cord is likely to occur, but they are prepared for it; it would be productive first of varicocele and œdema, and there would then be time to liberate the cord by cutting a channel downward and dropping it beneath the bone. —New York Medical Journal, August 28.

THE PATHOLOGY OF DYSMENORRHEA.—Some months ago, before the Netherlandish Gynecological Society, Dr. Mendes de Leon, as we learn from the Centralblatt fuer Gynaekologie for July 17, combated the obstruction theory of dysmenorrhea. He would divide dysmenorrhea into two classes, namely, dysmenorrheal endometritis and uterine spasm (essential dysmenorrhea). The first class would include all forms in which there was any local mechanical obstacle recognizable, such as a sharp turn in the uterine canal with secondary proliferation of the mucous membrane, stenosis, and the typical dysmenorrheal endomentritis. All other cases would fall under the head of uterine spasm. On the strength of Keiser's investigations, he was inclined to regard this spasm as affecting the sphincter of the uterus, that is, the cervix.

Out of 167 patients observed by the author during a certain length of time in the gynecological department of a public clinic, thirty-seven had complained of painful menstruation. In thirty-two of them a local cause was discovered, but in the five others, certainly virgins, the affection should be classed as spasmodic.

Digitized by Google

Besides these thirty-seven subjects of dysmenorrhea, there were among the patients twenty-one who had manifest stenosis without painful menstruation. Among the patients subjected to curetting there were seventeen who complained chiefly of dysmenorrhea, but only one of them had stenosis to a high degree. Of these seventeen, eight were completely cured by curetting; of the nine others, seven returned in the course of a year with a relapse of their old trouble, and two received absolutely no relief. At their earnest request, one of these women was subjected to oophorectomy, and the other to removal of the uterus.

Dr. Treub remarked that stenosis might be due to swelling of the mucous membrane occurring only at the time of menstruation, and be undiagnosticable at other times. If Keiser's investigations warranted the theory of spastic contraction, he thought high amputation of the cervix should be performed. Dr. Stratz called attention to the fact that diseases of the ovaries and of the Fallopian tubes might occasion dysmenorrhea. He mentioned a case of dysmenorrhea and sterility in which, after the failure of all the measures practiced in Holland, Schroeder's conical excision of the cervix had done away with both complaints. Dr. Van Tussenbroek stated that in the case of oophorectomy reported by the author of the paper the microscope had revealed "subacute oophoritis."

Dr. Van de Poll believed in heredity as a cause of nervous dysmenorrhea. In a family known to him two daughters suffered with dysmenorrhea, a son had dyspepsia, and the father was a drinker; in another family three girls had dysmenorrhea, a boy had nervous dyspepsia and headache, and the father was not a drinker. In this discussion, as usual when such a subject is talked about, nobody seems to have convinced anybody else; the author of the paper declared in his closing remarks that he still stuck to his classification, but he promised to try high amputation of the cervix in subsequent cases of hysterospasm. Our own opinion is that there is much to sustain Dr. Mendes de Leon's main contention.—New York Medical Journal, August 7, 1897.

CATARRHAL DISEASES OF THE NOSE AND THROAT.

By J. D. ALBRIGHT, M. D.

To any careful observer, and all physicians should be such, it must have become apparent that catarrhal diseases of the nose and throat are becoming more and more frequent and play a most important part in the practice of every physician who gives more than passing attention to their treatment.

There seems to be a prevailing opinion in the minds of many of our profession that the correct treatment of these diseases involves the use of special and expensive instruments and requires a more than ordinary degree of skill to use them properly, so that these cases are allowed to drift to the specialist, who, by the way, is often no more than a physician who keeps posted and has the courage to apply his knowledge.

By a moderate amount of study and diligent practice, by perseverance in the use of the methods at hand, the general practitioner may overcome imaginary difficulties that seem to stand between him and success, and he will be richly rewarded for his time and labor so spent. The instruments that may be called necessary are: A good light, a head mirror, a nasal speculum, a tongue depressor, and a laryngeal mirror. With these as aids in diagnosis, if the examination is conducted carefully, we are certainly in a position to diagnosticate the existing conditions, and therefore treat them intelligently. Among the laity there is much termed "catarrh" that bears no relation whatever to it, and in this disease more than in any other these people glory in making their own diagnosis, so that the physician is often taken off his guard and is led to treat catarrh on the strength of his patient's words instead of a careful examination. We have different forms of this trouble: 1, simple chronic rhinitis; 2, hypertrophic rhinitis, and 3, atrophic rhinitis.

Simple Chronic Rhinitis.—This is a simple inflammation of the mucous membrane of the nasal cavity, without any structural changes. Its only symptom is a discharge of mucus, or sometimes, when of long standing muco-pus. On examination you will nfid a congested membrane, with here and there yellowish or whitish spots of mucus. In the vault of the pharynx, where there is much glandular tissue, there will be a swelling, giving them a turgid appearance, and the secretion which covers them will be found to be more tenacious. When these cases seek a physician, he can with a certainty predict a perfect cure, as it is only in the first stage, simple rhinitis, although of perhaps quite a long standing, getting no worse, nor yet any better.

Treatment.—The treatment for this condition is as follows: Cleanse the mucous membrane thoroughly with warm water, applied by means of a douche, such as the Bermingham, after which, by means of the same douche or an atomizer, make an application of the following: Glyco-thymoline (Kress) one part, water distilled, three to six parts. This mixture should be used twice daily. It will be found best to use six parts of water for a beginning and gradually strengthen until only three parts are used. As before stated, there will very seldom be more than this treatment required in this form of nasal catarrh, as they at once proceed to recovery.

Hypertrophic Rhinitis.—A certain number of cases suffering with simple rhinitis will neglect taking treatment until they have developed our second class, chronic hypertrophic rhinitis, and will then consult the physician. Here, on examination, a different aspect presents itself, as we have first, marked structural changes, a proliferation of all the normal mucous membrane, making it of increased size, therefore called hypertrophic [illegible]rged. The glands in the vault of the phary[illegible] are also enlarged, subject to the same influence as the membrane of the nose. The secretions are now thick and tenacious, which with the

Digitized by Google

enlarged membrane occludes the air passages, causing difficult breathing, causing the voice to be nasal in character, and causing the patient to become concerned about himself, perhaps for the first time.

Treatment.—In the treatment of this condition, all that I have said on the previous stage applies to this one, with more added. Do not forget to cleanse the passages; this is the fundamental principle of successful treatment, and as such a saline solution, such as glyco-thymoline, is practically the best remedy for the purpose. It cleanses and it heals, it causes a proper degree of healthy stimulation, it acts as an antiseptic and is a most efficient deodorizer. As the comfort of the patient is a desideratum, the use of a 5 per cent. solution of cocain applied to the turgescent membrane is often advisable, covering the membrane which covers the inferior turbinated bones, in order to allow more freedom in breathing. This may be done once or twice daily by the patient, at different times as occasion demands. The action of cocain on these tissues is well known. The cleansing solution and the cocain applications the patient can well himself apply, but the following application should be made in the office of the physician, as it can be more thoroughly accomplished, and I am of the opinion that the mind influence over the patient is better when he must daily visit the physician; it reminds him that he is under treatment and thus prevents his neglecting the home treatment. For the following remedy a good atomizer should be used, with a nasal tube, and a long tube for the pharynx, and an application should be made once daily, while necessary. This will cure. Iodin 3 grs., potass. iodid 10 grs., zinc sulpho-carb. 15 grs., glyco-thymoline (Kress) 1 oz., aqua q. s. ad 4 oz. Mix. Sig.: Use as above stated. This treatment kept up for a month, or perhaps longer if a serious case, will do its work well.

Atrophic Rhinitis.—This form is caused at times by neglecting the disease when in the hypertrophic stage, and is essentially a death of the tissues. The tissues were crowded to death by the enlargement. Here there is plenty of room in the nasal cavity, there is no interference with the voice or breathing, the secretions are hard and in the form of crusts, the posterior wall of the pharynx will be seen to be dry and shiny, the sense of smell is interfered with, sometimes destroyed, there is at times pain in the frontal sinuses, or in other parts of the head, the patient is irritable and very sensitive to atmospheric changes.

These cases are very often afflicted with a fearful odor, very often on this account do they consult you. Our words of encouragement to the patients suffering with the two varieties preceding must now cease, for unfortunately the cure of atrophic rhinitis is in most cases beyond us; be careful, then, what you promise your patient. Promise nothing but relief, and if occasionally one case or another leaves you satisfied that you have cured him, restored his sense of smell or hearing, do not become elated, for if you thus set up your standard you will very often meet with bitter disappointment.

Treatment.—The indications we wish to meet in these cases to afford our patients relief are twofold, cleansing and disinfecting, and I may add, keeping them thus and attempting to regenerate the atrophied membrane, which, as before said, can be but very seldom hoped for. The first indication of cleansing and disinfecting is met by daily washings with the solution before given of water and glyco-thymoline, three of the former to one of the latter, so as to remove all offending secretions. Occasionally these crusts must be removed by means of a forceps, which, if necessary, must not be neglected. A spray of liquid vaseline to which a little camphor has been added, after these washings, will be agreeable to the patient, as it will prevent the annoying dryness of the air passages, and I doubt not but that it is of some remedial value.

For the purpose of stimulating and regenerating the atrophied mucous membrane there are recommended salicylic acid, galangal root, nitrate of silver, etc., blown into the nose by an insufflator, but I cannot but repeat myself and say that this will very seldom be accomplished, and he who is careful will never promise nor yet expect it. Regarding the internal treatment of catarrh, I have never seen any good result from its use, and I think the consensus of opinion of the entire profession, the regular, hold that it is a local disease and as such requires only local treatment. Constitutional defects must be recognized and treated, but the remedies employed have no effect on the catarrh, per se.—Journal American Medical Association, October 24.

Book Notices.

HARE'S PRACTICAL DIAGNOSIS. The Use of Symptoms in the Diagnosis of Disease. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, Laureate of the Medical Society of London, of the Royal Academy in Belgium, etc. New (2d) and revised edition. In one octavo volume of 598 pages, with 201 engravings and 13 full-page colored plates. Cloth, $4.75. Philadelphia, Lea Brothers & Co., Publishers.

It is strange that the natural and logical plan of Dr. Hare's Diagnosis should have escaped previous writers and should now come with all the freshness and force of a new idea. He has completely reversed the method of his predecessors and has presented his subject as a case always presents itself to the physician, namely, symptoms first. Previous writers have taken up diseases first, describing their symptoms thereunder, a plan which compels the leader in practice to reverse the order in his mind and either to recollect the particular groups which indicate the several diseases, or to guess at the disease and compare its description in the book with the case at hand. This labor of mind and memory Dr. Hare has obviated and therefore at once reduced the difficulty and increased the certainty of diagnosis. The book consists essentially of two parts, first, The Manifestation of Disease in Organs, and second, The Manifestation of Disease by Symptoms. The physician discovering a symptom in any organ can at once find its clinical significance in the first part, and in the second he can equally as-

Digitized by Google

certain the special indications of the more general symptoms, such as fever, headache, vomiting, cough, pain, etc., etc. Obviously two or more symptoms lead to a diagnosis, as the botanist easily identifies a plant by means of its characteristics arranged according to a similar natural system in the well-known botanical key. Hare's Diagnosis is, however, much more than a key, for it is fully descriptive. The index is equally novel and helpful. Under each symptom is a list of the diseases in which it occurs, and under each disease are indexed its symptoms. The physician finding a symptom accordingly has at hand a suggestive list of possible diseases and on comparison of the lists following two or more symptoms he has a prompt method of exclusion.

However, the work is one that will not permit the throwing aside of the ordinary works on diagnosis. It is a work to assist one in arriving at a diagnosis, to give hints, as it were, to help one to answer the question, What is it? If the author would add a third part treating each disease as an entity, according to the method of the ordinary works on diagnosis, then indeed the work would be a complete one. If, for instance, one wishes to read up on the diagnosis of typhoid fever he will find it impossible to do so without going to different parts of the work. For there is no chapter or division given to this or any other disease in its entirety. And yet typhoid fever is referred to in forty-nine places, under different conditions and symptoms.

But this is not really a criticism of the work, for the author does not claim to be following the old method, but taking up a new. The new is most certainly superior to the old, although in this instance the old should not be misplaced by the new, but rather be added to it. The book is well illustrated, and we bespeak for it a more rapid sale as time makes it known to the profession.

A Text-Book of Practical Therapeutics, with especial reference to the application of Remedial Measures to Disease and their Employment upon a Rational Basis. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, etc. With special chapters by Drs. George E. de Schweinitz, Edward Martin, and Barton C. Hirst. Sixth edition, thoroughly revised and largely rewritten. In one octavo volume of 756 pages. Cloth, $3.75; leather, $4.75. Lea Brothers & Co., Publishers, Philadelphia and New York, 1897.

This book is so well and favorably known that it is hardly necessary to offer any word of praise. The fact that it has been necessary to issue another edition, making the sixth in as many years, proves that the efforts of the author have been appreciated by the profession. He and the publishers have taken the opportunity to improve the present volume in many ways, bringing it up to date.

No small part of the approval earned may be justly due to the original plan upon which the volume is constructed, being divided into two sections, in the first of which the author deals with remedial agents, both medicinal and non-medicinal, while in the second he presents a description of the various diseases, their symptoms, complications, treatment, etc. These two integral parts are brought into direct relation by means of numerous references, thus connecting a description of the disease with the rational employment of appropriate therapeutic agents. It would be difficult to formulate a plan more helpful, or which would enable the student to gain a more practical grasp of the chief purpose of his profession. Ease of reference is provided for in the highest degree by the alphabetical arrangement of the text and by two full indexes—one of remedies and the other of diseases. A large part of the edition has been rewritten, and the arrangement is such that it can be used most advantageously with the author's Text-book of Practical Diagnosis, noticed above.

The treatment of diphtheria with antitoxin is accorded nearly four pages, and the author's conclusions are most favorable to the method. Among the new drugs mentioned are eucaine, formaldehyde (formicaldehyde), methyl blue, nuclein, pyrogallol scopalamine, suprarenal, thymus, and thyroid glands, trichoracetic acid, etc. Dr. Hare has not depended upon himself, but has some of the specialties looked after by those specially qualified for the work. Dr. G. E. de Schweinitz contributes the articles on the treatment of diseases of the eye; Dr. Edward Martin on treatment of venereal diseases and on antisepsis; Dr. Barton C. Hirst on treatment of diseases of the puerperal state; and Dr. J. Howard Reeves on treatment of the diseases of the upper air passages.

Altogether the book is a practical work on therapeutics, which can be referred to with profit daily by the few men yet left in the profession who prefer to treat diseases with drugs rather than with the knife.

The following books and reprints have been received:

The Peritoneum. By Byron Robinson, B. S., M. D., Chicago, Ill., author of "Practical Intestinal Surgery," "Landmarks in Gynecology," etc. Part 1.—Histology and Physiology. 247 illustrations; 406 pages; bibliography, 103. Price, $3.75. C. V. Waite & Co., Publishers, Chicago.

From Charles P. Noble, M. D., Philadelphia: A New Method of Suturing the Abdominal Wall in Celiotomy; Concerning Movable Kidney; Ectropion of the Cervix in the Nullipare Resembling Laceration of the Cervix; On the Buried Suture in Abdominal Surgery; A Clinical Report on the Course of Pregnancy and Labor as Influenced by Suspensio Uteri; The Development and the Present Status of Hysterectomy for Fibromyomata.

From Henry T. Byford, M. D., Chicago: Extirpation of the Rectum per Vaginam with Utilization of the Vagina to Replace the Lost Rectal Tissue; Vaginal Section for the Cure of Retroversion of the Uterus.

From J. T. Eskridge, M. D., Denver: Report of a Case of Intradural Spinal Tumor, Extending Through the Foramen Magnum, Compressing the Extreme Upper Portion of the Cord, and Almost Completely Destroying It at the Third Cervical Segment.

From Lewis S. Somers, M. D., Philadelphia: Hereditary Deafness; Atropin Rhinitis.

Digitized by Google

INDEX TO VOLUME I.

Abdominal surgery, Liability to prosecution for damages in... 77
Abortion, Rational treatment of... 74
Abscess of the nasal septum, by F. S. Owen... 213
A case of congenital malformation of the rectum, by J. P. Lord... 207
Acute nasal catarrh; frost bite of the auricle; furunculosis; diffuse inflammation of the external auditory canal, by S. S. Bishop... 215
Agnostic, Medical and surgical... 120
Albumin, Casts in the urine without... 21
Albumin. Practical test for... 79
Albuminuria. Edema without... 16
A lesson in hemiplegia, by J. Lue Sutherland... 176
Ammonal in the courts... 194
Antitoxin report of the American Pediatric Society, Summary of... 73
An unfortunate but instructive case of middle-ear disease, by H. Gifford, Omaha... 61
Appendicitis... 76
Bill Nye on... 21
Operative technique in... 152
Treatment of... 62
A plea for more conservative medicine and surgery, by Rebecca Hanna... 179
Are chronic tropical diarrhea and amebic dysentery identical? by O. Grothan... 180
Artificial respiration... 24
Asepsis in obstetrics, Practical... 114
Auscultation of the lungs up to date, by J. H. Tyndale... 93

Bicycle, Woman and the... 50
Black eye... 109
Blood examination in disease, Significance of... 25
Boils, Cranberry for small... 175
Bone marrow, Remedial application of... 44
Book notices... 52, 80, 110, 139, 169, 199, 239
Breech presentations, by A. D. Wilkinson... 141
Bromides, Some of the unsuspected effects of the... 197
Bromoform in whooping-cough... 51

Calculous pyelitis, by L. L. McArthur... 1
Cancer of breast, Another method of exterminating, 50
Cancer of the uterus... 137
Cannabis indica... 137
Carbolic acid, Injection of, in hydrocele, etc... 53
Case of stricture of esophagus, the result of empyema, by J. H. Miller... 88
Casts in the urine without albumin... 21
Causes of migraine... 23
Cedar County Medical Society... 188
Chloroform in labor, by Georgiana Grothan... 117
Chloroform to prevent perineal lacerations... 78
Chronic interstitial nephritis, by J. F. Stevens... 13
Chronic malnutrition... 20
Cleanse the alimentary canal... 138
Clinical aspect of tubal pregnancy, by J. E. Summers, 111
Clinical lecture on meningocele and encephalocele, by Christopher Heath, (illustrated)... 154
Clinical notes on eucaine hydrochlorate, by W. S. Dayton... 146
Conservative medicine and surgery, A plea for more, 179
Congenital sacro-coccygeal tumors, by M. H. Everett, 10
Constipation in infants... 196
Cornea, Ulcers of... 182

Death rate... 20
Diagnosis of typhoid fever, by J. E. Woodbridge... 175
Dilatation of the stomach, A case of, (selected article, illustrated)... 95
Dislocation of the hip, Management of congenital... 171
Dry heat, An original method of using, (illustrated)... 104

Eclampsia, Veratrum veride in puerperal... 238
Editorials—
About ourselves... 67, 223
American-Canadian-British-Medical Association, 129
Antitoxin treatment of diphtheria... 39
Bracelin "remedy"... 66
Campaign of ninety-six... 185
Death from antitoxin... 39
Dermatitis from Roentgen ray... 99
Discovery of anesthesia... 159
Epileptic melancholia... 20
Harvey Medical College... 224
How is this?... 66
Illinois State Board of Health and medical legislation... 159
Jonathan Hutchinson... 186
Medical advertising... 225
Medical education again... 38
Medical Journal and the "reading notice"... 65
Missouri in line... 98
Mitchell's fluid... 128
Editorials—
Nebraska State Medical Society... 37
Reciprocity among examining boards... 67
Second Pan-American Medical Congress... 223
Senn's address... 17
Specialist wanted... 98
The tendency of the day... 18
Typhoid fever... 157
What about therapeutics?... 98
What goes insane... 185
Vaccinating the antivivisectionist... 19
Vivisection legislation... 19
Edema without albuminuria... 16
Endometritis, Treatment of chronic... 108
Entrance examination... 106
Eucaine hydrochlorate, Clinical notes on... 146
Experience of an American physician in Mexico... 194
Extrauterine pregnancy and hematocele... 23
Eyeball, Injuries of the... 11

Feeding of infants, The artificial... 197
Fetus in fetu, by J. S. Leonhardt... 121
Fetus, five months, developed in the abdomen of a young man... 97
Five months fetus developed in the abdomen of a young man... 97
Frost bite of the auricle... 215
Furunculosis... 215

Ganglia of the wrist, Injection of carbolic acid in... 53
Gasserian ganglion, Surgery of the... 149
Gastric ulcer, by F. P. Dorsey... 70
Gastrostomy, Modern methods of, (illustrated)... 123
Glycosuria, Note on the relation of reflex genital irritation to... 206
Gonorrhea, Rapid cure for... 237
Guaiacol and its uses, by Allen F. Miller... 208

Hay fever... 136
Hegar's sign... 122
Hematocele, Extrauterine pregnancy and... 23
Hemiplegia, A lesson in... 176
Hip-joint, Prevention of hemorrhage in disarticulation at the... 51
Housemaid's knee, Injection of carbolic acid in... 53
"How is this?" by J. V. Beghtol... 101
How to remove pus tubes without rupture... 134
Hydrocele, Injection of carbolic acid in... 53
Hydrocele, Radical cure of... 197
Hyperemesis—Pernicious vomiting of pregnancy, with report of a case, by F. A. Butler... 34

Infant feeding, by A. R. Mitchell... 5
Injection of carbolic acid in the treatment of hydrocele, etc., by V. H. Coffman... 53
Injuries of the eyeball, by W. L. Dayton... 11
Insanity of pregnancy... 22
Intra-abdominal injuries from horse-kicks, by A. F. Jonas... 29
Intubation, by H. M. McClanahan... 119

Jenner centenary at Gloucester... 20

Kidney, Tuberculosis of... 46

Labor, Something about instrumental... 181
Lavage of the stomach, Indications for... 108
Liability for negligence in making examination... 49
Limits of the art of surgery... 127
Locomotor ataxia, Early diagnosis of...
Lupus, Treatment of, with Maragliano's tubercle-antitoxin serum... 154

Management of congenital dislocation of the hip, by B. B. Davis... 171
Medical experience among Indians, by G. W. Ira... 89
Medical nomenclature... 78
Medical Society of Missouri Valley... 163
Medical treatment of a common clinical form of functional impotence... 48
Meningocele and encephalocele, Clinical lecture on... 154
Meningocele, with report of a case, by J. P. Lord, (illustrated)... 143
Metaplastic tumor, etc., by B. B. Davis... 81
Middle-ear disease, An unfortunate but instructive case of... 61
Middle ear, Suppuration of... 7
Migraine, Causes of... 23
Mississippi Valley Medical Society... 164, 189
Murphy's button, Substitute for... 77
My latest improved binaural stethoscope, by Chas. Denison, (illustrated)... 59
Myelitis, by J. M. Aikin... 147

Nasal catarrh, Acute... 215
Nasal septum, Abscess of the... 213
Nebraska State Medical Society... 71
Nebraska State Medical Society, Proceedings of... 40
Nebraska State Board of Health, Proceedings of, 43, 73, 104, 139, 168, 198
Needle holder, A self-clamping, (illustrated)... 125
Nephritis, Chronic interstitial... 13
Note on the relation of reflex genital irritation to glycosuria, by G. Frank Lydston... 206
Notes of a case of suspended volition and locomotion, by G. A. Meredith... 55
Notes and news... 39, 68, 100, 130, 161, 187, 227

Omaha Medical Society... 230
Operative technique in appendicitis, with cases, by C. C. Allison... 152
Ovarian cyst... 81
Ovarian tumors, by Franklin H. Martin... 209

Parrot yarn... 16
Percussion of the heart with the body bent forward... 45
Pernicious anemia... 24
Phlebitis after typhoid fever... 132
Pocket full of spoons... 21
Post-partum hemorrhage, Turpentine in... 50
Practical asepsis in obstetrics, by J. Lue Sutherland, 114
Pregnancy after ventral fixation... 50
President's address, by J. E. Summers, Jr... 25
Puerperal eclampsia, by Chas. Rosewater... 84
Pulmonic sound, Value of... 75
Pyelitis, Calculous... 1

Rectum, malformation of the, A case of congenital... 207
Remedial application of bone marrow... 44
Report of surgical cases, by J. P. Lord... 57
Roentgen ray, New application of... 97

Sacro-coccygeal tumors, Congenital... 10
Salicylate of methyl by absorption... 21
Salicylic medication through the skin... 21
Salol, Local action of... 24
Sarcoma of ovary... 81
Schleich's method of local anesthesia... 24
Second Pan-American Medical Congress... 71, 231
Senna, Palatable, for children... 206
Senn's clinic... 22
Serum injections, Cause of death in... 76
Serum treatment of malignant tumors... 77
Serum therapy, Summary of... 78
Significance of blood examination in disease, by Wilson O. Bridges... 26
Skin grafting... 138
Something about instrumental labor, by F. Damour, 181
Stray thoughts... 126
Stricture of esophagus... 88
Suppuration of middle ear, with some of its results, by S. E. Cook... 7
Surgery of the gasserian ganglion, with demonstration and report of two cases, by J. B. Murphy, (illustrated)... 149
Surgical notes, by J. E Summers, Jr... 204
Syme's operation as a prothetical expedient, by P. H. Salter... 56
Symptomatic vs. Anatomical cure after gynecological operations... 47

Tape worm, A new human, by H. B. Ward... 35
Temperaments, by A. R. Mitchell... 201
The blacksmith and the physician... 24
The medical and surgical agnostic, by H. G. Wetherill, 120
Thiersch's method of skin grafting... 138
Treatment of appendicitis, by H. J. Winnett... 62
Tubal pregnancy, Clinical aspect of... 111
Tubercular peritonitis... 81
Tuberculosis, Early diagnosis of tubercular... 132
Tuberculosis of kidney... 46
Tuberculosis, Precedent causes of... 135
Tuberculous cervical glands, Injection of carbolic acid in... 53
Turpentine in post-partum hemorrhage... 50
Two new needle holders, by Geo. Haslam... 218
Typhoid fever, Diagnosis of... 175
Typhoid fever, Treatment of, by internal and external use of guaiacol... 197

Ulcers of the cornea, by J. W. Bullard... 182
Uricacidemia, by Inez C. Philorick... 218

Vaginal speculum, Modified, (illustrated)... 107
Varices of leg... 109
Ventral fixation, Pregnancy after... 50
Veratrum veride in puerperal eclampsia... 238
Vinegar as an antidote to carbolic acid... 108
Vomiting of pregnancy... 34

Weaning of infants... 203
Whooping-cough, Bromoform in... 51
Why the quack prospers... 136
Woman and the bicycle... 50

INDEX TO VOLUME II.

Abortion and its treatment, by A. E. Scofield... 363
Abortion, Septicemia from... 365
Abortion, Treatment of... 104
Abscess of spleen following typhoid fever, by H. J. Winnett... 100
A case of craniotomy, by J. M. Hardy... 263
A case of placenta previa, ending fatally, by F. L. Frink... 108
A contribution to the surgery of gastroptosis and enteroptosis, by B. B. Davis... 291
Acromegaly, Two cases of... 166
Acute colic. Prescription for... 386
Acute purulent inflammation of the middle ear, by A. N. Loper... 234
Address on surgery, by W. W. Keens... 207
Albumin test, Easy... 215
Alcoholism and the opium habit, Strychnia cure of... 85
Amytrophic lateral sclerosis, by J. M. Aikin... 262
An appalling situation... 180
A new contrivance for intestinal anastomosis—Selected article (illustrated)... 206
A new cure for the radical cure of inguinal hernia without buried sutures—Selected article (illustrated)... 44
An observation, by J. L. Greene... 69
Antiseptic treatment of diphtheria... 22
Antitoxin treatment of diphtheria, by W. D. Jones... 359
A protest... 279
Appendicitis... 83
Diagnosis and treatment of... 138
Perforative... 41
A successful gastro-enterostomy with the Murphy button, for pyloric obstruction due to a tumor, by J. E. Summers, Jr... 132
A Vienna surgeon's disappointment... 352
Avulsion of the uterus... 205

Board of health proceedings, 29, 56, 90, 123, 157, 188, 217, 247, 320, 358, 385
Brain, Topical diagnosis of the... 91
Bromoform mixture... 202

Cancer of the lower lip, Operative treatment of... 17[3]
Cancer of the uterus... 10[4]
Carbonate of guaiacol... 31[9]
Catarrhal diseases of the nose and throat, by J. D. Albright... 388
Catgut, Preparing... 180
Cerebral abscess due to infective otitis media, by J. E. Summers, Jr... 96
Chills in typhoid fever, by J. F. Stevens... 253

Google

Chinese eunuchs ... 14
Chloroform, Death from ... 338
Chloroform in surgery, by B. F. Gay ... 128
Choledocholithotomy, by A. R. Mitchell ... 110
Climatic management of pulmonary tuberculosis, by B. F. Crummer ... 372
"Colds," Some hints as to the treatment of ... 50
Complicated cases of laryngismus and tetany, by C. C. Crawl ... 284
Congenital tumor of orbit—Report of a case, by H. D. Boyden ... 301
Corns, Remedy for ... 243
Country doctor, The ... 278
Craniotomy, A case of ... 263
Creighton Medical College ... 277
Criminal cases, What shall we do with our ... 1
Cure of stricture of urethra by electrolysis, by H. C. Sample ... 42
Curette in gynecology, Some abuses of ... 61

Death from chloroform, by L. Schooler ... 338
Decline in cocaine ... 116
Dementia in its clinical aspects, by Mary Strong ... 368
Diagnosis and treatment of appendicitis, by A. E. Scofield ... 138
Diagnosis of tuberculosis, by A. J. Hosmer ... 326
Diagnostic errors—Pregnancy mistaken for abdominal neoplasms, by A. F. Jonas ... 9
Diphtheria, by E. C. Rankin ... 294
Antiseptic treatment of ... 22
Antitoxin treatment of ... 359
Disease, Beginnings of ... 5
Dislocation of the hip ... 386
Dyspnea, A remedy for ... 215

Early signs of typhoid fever, by W. O. Bridges ... 294
Ectopic gestation, by Ewing Brown ... 366
Eczema and its treatment, by W. N. Hunt ... 261
Editorials—
A distinctive medical badge ... 111
A good sign ... 152
Amendment to medical law ... 48
A national federation on legislation ... 47
Cheap degrees ... 211
Chilblains and urticaria—Their relation to modern pathology ... 79
Complimentary comments ... 17
Diagnose or diagnosticate ... 111
Disease of the heart ... 211
Forced incurvation of the vertebral column in the treatment of tabes dorsalis ... 213
Gonorrheal vaginitis and its treatment ... 349
Iowa and Nebraska ... 176
Koch's new tuberculin (T R) ... 152, 272
Koch again ... 153
Legislation restricting animal experimentation, 212
Medical legislation ... 80
Medical men and medical societies ... 111
Medical Society of the Missouri Valley ... 272
Nebraska State Medical Society ... 151
Our decreasing birth-rate ... 241
Presentation of sense ... 378
Prognosis ... 112
Richet on Pasteur ... 305
Semi-centennial meeting of the American Medical Association ... 79
Sir Spencer Wells ... 81
Some new points in physiology which bear upon diabetes ... 378
Strychnia in pulmonary tuberculosis ... 177
The admission to membership in the Nebraska State Medical Society ... 176
The British Medical Association ... 239
The bubonic plague ... 47
The doctor in politics ... 305
The gonococcus ... 15
The St. Louis expose ... 239
The transmission of tuberculosis ... 350
Treating symptoms ... 350
Treatment of sarcoma with Coley's fluid ... 377
Tuberculosis and leprosy, and their relation to state medicine ... 46
We must either perfect our asepsis or return to antisepsis ... 240
Western Surgical and Gynecological Association, 17, 377
What is osteopathy? ... 272
What of the future? ... 15
Who are to blame for hospital abuse? ... 273
Electrolysis in gynecology, My further experience in, 189
Emetics ... 24
Empyemia, by A. W. Sherman ... 297
English as she is wrote ... 24
Enteroptosis, A contribution to the surgery of ... 291
Epilepsy, by J. L. Greene, University Place ... 7
Etiology and prevention of puerperal fever, by W. J. Findley ... 105
Etiology and treatment of membranous croup, so called, by H. M. McClanahan ... 162
Eucaine as a local anesthetic, by G. W. Shidler ... 40
Examination gems ... 348
Extrauterine gestation, by J. D. Tedrow ... 220
Eyeball, Unique results from trauma of the ... 65
Eyelid symptoms in Graves' disease ... 304

Faith cure fanatics struggling with diphtheria ... 20
Fallacies in the practice of medicine, Some of the ... 11
Forceps and director combined for vaginal hysterectomies ... 318
Foreign body in the air passages ... 41
Formalin disinfector and lamp ... 277

Gall bladder and bile ducts, Surgery of the ... 311
Gall ducts, Surgery of the ... 334
Gastro-enterostomy, A successful, with the Murphy button ... 132
Gastroptosis, A contribution to the surgery of ... 291
Gonorrhea, Prescription for ... 386
Prevention of ... 243
Grafting of tendons for paralytic deformities, with report of a case by C. C. Allison ... 228
Guaiacol and creosote in pulmonary phthisis ... 21

Hematuria, by B. F. West ... 67
Hemorrhage ... 243
Hemorrhoids, External ... 243
The injection method for treating ... 288
Treatment of, by injection method ... 259
Homeopathic treatment ... 352
Honors misplaced ... 271
Horsley's antiseptic wax ... 38
How to write a medical paper ... 21
Hypnotism in general medicine, by J. T. Eskridge ... 37
Hydrothorax and empyema, Treatment of ... 4

Infection following childbirth, with report of a case, by H. S. Bell ... 197
Inguinal hernia, Radical cure of ... 387
Inhalation treatment of pulmonary tuberculosis, by W. H. Christie ... 371
Importance of early operation in intraocular sarcoma, by D. C. Bryant ... 219
Injection method for treating internal hemorrhoids, by R. D. Mason ... 288
Iritis, by W. L. Grant ... 101
Is phlebotomy a lost art? by W. H. Christie ... 135
Is there a typho-malarial fever? ... 3, 6
Itching and the itch ... 78

Leukemia, Splenic myelogenous ... 39
Local anesthetic, Eucaine as a ... 40

Malthus redivivus ... 20
Materia medica and therapeutics, by W. F. Milroy ... 233
Medical department of the Trans-Mississippi International Exposition ... 276
Medical experience, by F. D. Haldeman ... 159
Medical sectarianism and medical legislation ... 280
Medical societies—
American Medical Association ... 186
Cedar County Medical Society ... 155, 182
Custer County Medical Society ... 118, 385
Elkhorn Valley Medical Society ... 25, 117, 216, 310
Fillmore County Medical Society ... 284
Gage County Medical Society ... 216
Lincoln Medical Society ... 54
Medical Society of the Missouri Valley ... 68, 119, 310
Nebraska State Medical Society ... 155, 183, 247
Omaha Medical Society ... 24, 89, 155, 311, 357
Utah State Medical Society ... 357
Western Surgical and Gynecological Association ... 385
Medicine as a profession ... 144
Membranous croup, Etiology and treatment ... 162
Mental fixation influenced by the rectl muscles of the eye, by M. H. Garten ... 165
Middle ear, Some remarks upon the treatment of chronic suppuration of the ... 302
Modification of the female catheter, by R. E. Eskildson ... 171
Myxedema following extirpation of the accessory thyroid at the base of the tongue ... 173
My further experience with electrolysis in gynecology, by Charles Rosewater ... 189
Middle ear, Acute inflammation of the ... 234

Nervous exhaustion, by J. M. Aikin ... 340
Night sweats of phthisis ... 83
Notes and news, 18, 49, 82, 114, 153, 178, 213, 242, 275, 306, 351, 379

Obstetrics, by Victor H. Coffman ... 254
Old days and the new ... 24
Omaha Medical College ... 276
One of Eugene Field's gems ... 50
Operation for ulcus ventriculi chronicum—three cases, with remarks on indication for operation, by A. F. Jonas ... 285
Operative treatment of cancer of the lower lip, by B. B. Davis ... 173
Operative treatment of hallex valgus, by J. P. Lord, 195
Opium poisoning, Antidote for ... 50
Osteopathy bill, The vile ... 215
Ovariotomy, Effects of ... 169

Paranoia, by J. T. Hay ... 34
Paroxysmal tachycardia, as a menstrual concomitant, by I. N. Pickett ... 226
Parsley to correct onion breath ... 72
Passing of the physician ... 21
Pathology of dysmenorrhea ... 387
Permanganate of potash for intrauterine douching ... 116
Pessaries ... 248
Phantom tumor ... 41
Phosphaturia—a case; suprapubic cystotomy—a case, by C. C. Allison ... 68
Physical training and education, Relation of the medical profession to ... 70, 107
Physician's and lawyer's fees ... 245
Placenta previa, ending fatally, A case of ... 108
Pneumonia, Some irregular forms of ... 249
Treatment of ... 299
Post-operative insanity—three cases, by A. F. Jonas ... 125
Pott's disease, Report of twenty-three cases of paralysis complicating ... 81
Practical surgery—Treatment of wounds, by J. E. Summers, Jr. ... 347, 374
Pregnancy and fibroids ... 319
Pregnancy mistaken for abdominal neoplasms—Diagnostic errors ... 9
Presentation of sense ... 378
Prevention of iodism in the use of potassium ... 238
Prevention of tuberculosis, by J. M. Emmert ... 229
Professional degeneracy, by F. S. Thomas ... 290
Psoas abscess following confinement ... 386
Puerperal eclampsia ... 84
Puerperal fever, Etiology and prevention of ... 105
Puerperal sepsis, by A. B. Anderson ... 341
Pulmonary tuberculosis, Climatic management of ... 372
Etiology, symptoms, and pathology, by E. V. Silver, 323
Inhalation treatment of ... 371
Medicinal treatment of ... 370

Recent pathological research, by A. D. Wilkinson ... 199
Recurring amnesic aphasia following attacks of Jacksonian epilepsy, by P. H. Salter ... 259
Reflex nervous cough—Notes from a lecture by Prof. Dr. Schech, by Paul Ernest Koerber ... 285
Relation of the medical profession to physical training and education ... 70, 107
Relation of the rectum and genitals in gynecology, by B. Robinson ... 342
Report of a case of vesical calculus, by J. O. Dawson, 13
Report of twenty-three cases of paralysis, complicating Pott's disease, etc., by W. Rose Martin ... 81
Retroflexions of uterus, Surgical treatment of ... 194
Retroversion of the uterus, by F. H. Martin, (illustrated) ... 78
Revolution in medicine ... 279
Ruptured tubal pregnancy, with report of two cases, by F. A. Long ... 344

Saline injections, Intravenous ... 43
Salt solution in shock, etc ... 267
Salt solution in surgery and elsewhere, What of the ... 257
Sarcoma, Importance of early operation in intraocular ... 219
School hygiene, by S. R. Towne ... 331
Senile gangrene, mitral regurgitation with hemiplegia, and general anasarca, by H. A. Hare ... 235
Septicemia from abortion, by Allan B. Cherry ... 365
Septic peritonitis, General ... 346
Shall we let down the bars? ... 232, 308, 354, 382
Some abuses of the curette in gynecology, by W. H. Christie ... 61
Some interesting cases, by E. Vilko ... 239
Some irregular forms of pneumonia, by B. F. Crummer ... 249
Some new points in physiology which bear upon diabetes ... 378
Some of the fallacies in the practice of medicine, by G. W. Wilson ... 11
Some remarks on the treatment of chronic suppuration of the middle ear, by F. S. Owen ... 302
Spinal curvature, Operative treatment of ... 319
Splenic myelogenous leukemia, by B. F. Crummer, Omaha ... 39
Stercorin and cholesteremia ... 172
Structure and function of peritoneal endothelium, by Byron Robinson ... 62
Strychnia cure of alcoholism and the opium habit, by C. L. Dana ... 85
Submammary infusion of salt solution in primary anemia from hemorrhage in shock and in septic infection, by J. G. Clark ... 267
Sugar in the urine ... 386
Suprapubic cystotomy, A case ... 68
Surgery of the gall bladder and bile ducts, by A. H. Ferguson, Chicago ... 311
Surgery of the gall ducts, by A. R. Mitchell ... 334
Surgical treatment of retroflexions of uterus, by G. W. Shidler ... 194
Surgical treatment of tendons, by N. E. Mighell ... 134

Tetanus antitoxin, by J. W. Cokenower ... 11
The beginnings of disease, by A. B. Somers ... 5
The bone of contention in railway surgery, by Robert McConaughy ... 231
The doctor as an educator, by J. Lue Sutherland ... 251
The eye in inherited syphilis, by S. E. Cook ... 130
The importance of diagnosis in tuberculosis ... 352
The menstrual function in insane patients, and the effects of ovariotomy, by M. M. Newbecker ... 169
The newer microscopy, by B. F. West ... 202
The practitioner's economics in time and effort ... 278
The relation of the medical profession to physical training and education, by R. A. Clark ... 70, 107
The technique in vaginal hysterectomy, by Byron Robinson ... 192
The treatment of abortion, by V. L. Treynor ... 104
The treatment of hemorrhoids by the injection method, by Lewis H. Adler ... 289
Three unusual recent cases from general practice—Foreign body in the air passages, phantom tumor, and perforative appendicitis, by F. A. Long ... 41
Thumb sucking in children, A new method for prevention of ... 180
Thyroid extract, Lesions produced by ... 353
Topical diagnosis of the brain, by H. B. Lowry ... 91
Toxin treatment of malignant tumors ... 181
Trachelorrhaphy and exhibition of new instruments for its performance, by W. O. Henry ... 142
Treatment of abortion ... 363
Treatment of hydrothorax and empyema, by J. M. Emmert ... 4
Treatment of pneumonia, by A. B. Somers ... 299
Treatment of puerperal endometritis by the Carossa method ... 337
Treatment of pulmonary tuberculosis, by G. H. Penrose ... 329
Treatment of sarcoma with Coley's fluid ... 377
Tricycle ambulance ... 238
Tubal pregnancy ... 344
Tuberculin, The new ... 246
Tuberculosis, Diagnosis of ... 326
Prevention of ... 229
pulmonary, Treatment of ... 329, 370, 371
Tuberculosis of the ovary ... 387
Two cases of acromegaly, by H. Gifford ... 166
Typhoid bacilli, Agglutination of, by chemical substances ... 353
Typhoid fever and cholangitis, by A. Detwiler ... 338
Typhoid excreta, Disinfection of ... 318
Typhoid fever, Abscess of spleen following ... 100
Typhoid fever, Chills in ... 253
Typhoid fever, Early signs of ... 294
Typhoid germs, To test for ... 210
Typho-malarial fever ... 210, 376

Unique results from trauma of the eyeball—Report of cases, by D. C. Bryant ... 65
Urethral injection ... 116
Use and abuse of the stomach tube ... 181
Uterine displacements, by Ewing Brown ... 102

Vaginal hysterectomy, Technique in ... 192
Vesical calculus, Report of a case of ... 16
Volvulus, with report of a case, by J. Lue Sutherland, 302
Vomiting, Obstinate ... 263

What of the salt solution in surgery and elsewhere? by O. Grotham ... 257
What our friends say ... 271
What shall we do with our criminal cases? by F. E. Coulter ... 1
Whooping-cough, Infection in ... 260

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google